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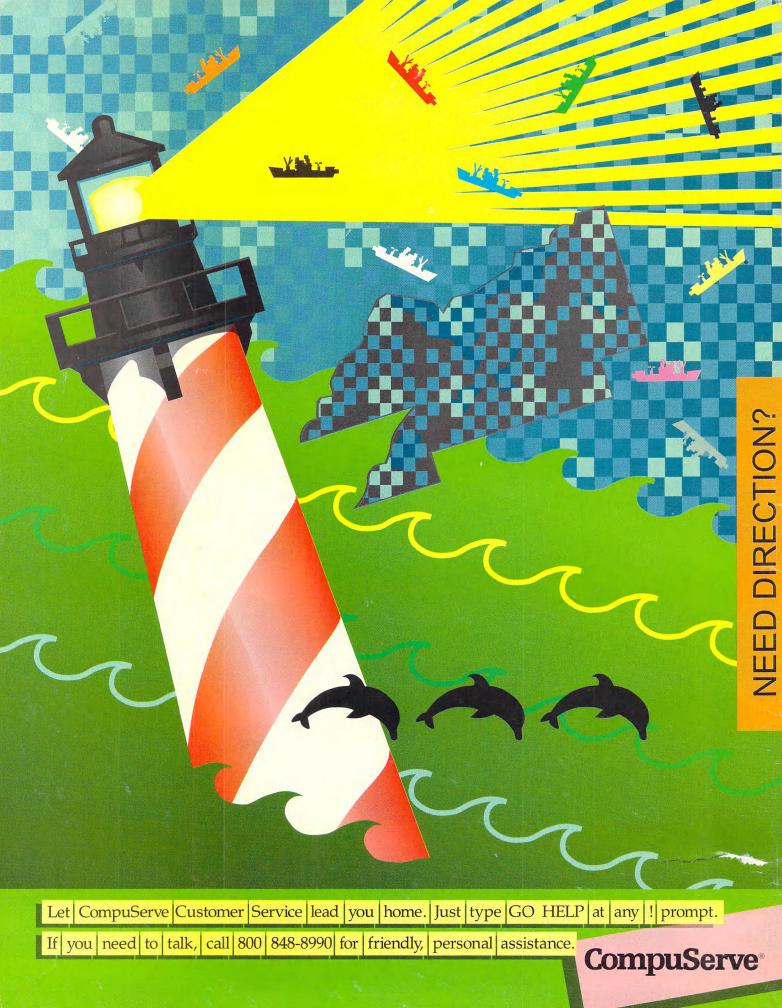
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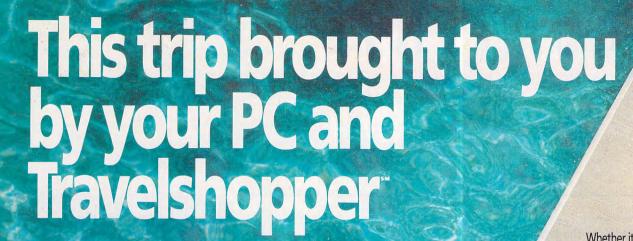
MAGAZINE



GOOD NEIGHBORS

Meet Seven Who Make Micropolis Work





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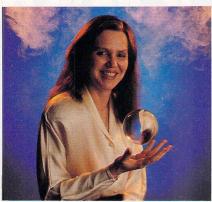
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ast year, while formulating cover story topics for 1990, we found ourselves asking, "Exactly what is it that makes CompuServe work? What is it that keeps people coming back and logging on regularly? What is it that attracts and holds thousands of new members every month?"

Undoubtedly there are many factors, not the least of which is online products and services that meet genuine needs and provide information quickly and accurately. But we all know that there is more to it than that. There's an extra *soupcon* of something that makes CompuServe a special place, a place worth coming back to again and again. Looking at our own backlog of magazine copy, it was easy to see the recurring theme that people—members like you—are what give life to CompuServe's pleasant yet productive atmosphere and solid sense of community.

We noticed another thing while leafing through those back issues: many articles centered on people who by nature of their position in the online community, either as forum administrators or information providers, tend to attract the most attention. We wanted to do something to change that. The "official" people are certainly vital, but they don't tell the whole story. The nitty-gritty is found with hundreds of others like you who make no Compu-money and have nothing to sell, yet devote many selfless online (and offline) hours to helping others, answering questions, offering advice, and going the proverbial extra mile. Many of these good neighbors are "standard" CompuServe members who actively participate in one or more forums; some are section leaders on a message board or assistant sysops at most.

Whatever their corner of Micropolis, we've decided to spotlight a few of these "unsung heroes" and try to capture a bit of that intangible quality that makes the CompuServe Information Service such a powerful and eminently helpful medium. The seven people we've chosen to profile are not necessarily winners in a popularity contest (most of these humble people would blanch at such a suggestion) but are swatches from the whole cloth of CompuServe—the sturdy fabric that braces us all. Turn to page 12 to meet some of your neighbors—people like you who make everything work on a day-to-day basis.

For a while it seemed like micro-microcomputers—those machines that are laptop or smaller or advertised as portables—fell on hard times. (Remember the eensy-weensy Timex Sinclair?) Some of the disenchantment occurred as a result of, among other things, the miniatures' limited mass storage and processing capabilities in the face of rapidly-advancing desktoppers. And, some "portables" just six or seven years ago were nearly as large as the Macintoshes of today and encased in arm-numbing, 1950s-style industrial weight battleship skin to boot. But that's all changing with a powerful new generation of laptops—and yes, even palmtops—that plug into a host of turbocharging add-ons.

Among these up-and-comers are the Zenith MinisPort, SupersPort and TurbosPort laptop models. These machines have a devoted (and growing) following, not to mention such amenities as 2400-baud modems, 100MB hard drives, VGA graphics and exhilarating processing speeds not seen in some desktop lines. For a rundown on these machines and the support services available online to Zenith laptop users via the Zenith Forum, turn to page 22.

Continuing our miniature theme in the Computing Services section this month, we also have a feature on the Atari's palmtop Portfolio, a "handheld Hercules" with surprising capabilities. For more on this machine and its online home in the Atari Portfolio Forum, see page 24. Happy palmtopping.

Douglas G. Branstetter Editor



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Japanese Language Communication

I would like to commend the magazine staff on the June feature story "Think Globally, Connect Locally" (pages 10-17). However, the article about international networking (p. 13) contained an inaccuracy.

Japanese language communication by standard formats is not possible within the Foreign Language Forum since the Message Area software is limited to 7-bit communication and strips the ESC character. Standard format Japanese messages require either 8-bit communication or ESC codes/7-bit to accommodate the large font.

Until CompuServe makes this change, forum participants are limited to mostly illegible, romanized Japanese. Eight-bit communication will also allow communication in Italian, Spanish, French, German and other languages that make use of 8-bit characters beyond 7-bit ASCII.

> Steve Johnston Houston, Texas

Editor's note: CompuServe members wanting to communicate in the full Japanese character set can do so by joining NIFTY-Serve, the Japanese-language information service developed under a licensing agreement with CompuServe. In addition, on the CompuServe/Forum European service, plans are under way for 8-bit character support of all major European languages.

Hometown Recognition

I was surprised to find that Pat Pugh included my city in her article "That Paddlewheeling Feeling" (May, p. 34) and mentioned its history in the shipbuilding industry. Very seldom does my little hometown get the recognition it so rightfully deserves. Thanks for the article. I enjoyed it.

I would like to encourage anyone traveling through the area to take time for a ride on the Belle of Louisville. It is one of the last true steamboats to operate on a daily basis here.

> Michael J. Denison Jeffersonville, Ind.

Software Reviews

I believe you are missing your niche by reviewing commercially marketed software.

While the reviews are well written and informative, plenty of other publications perform the same service, usually in greater depth by providing side-by-side comparisons and benchmarks. I believe you would better serve your particular readership by reviewing the software available for downloading on CompuServe. There are thousands of shareware and public domain applications, many of which are as good or better than their commercially distributed counterparts.

Michael Allen St. Charles, Ill.

Castle Combe

I enjoy your special features, and I hope to see more of them. However, I must point out a minor error in your article "Upstairs, Downstairs" (June, p. 32).

The picture of Castle Combe on page 33, furnished to you by the British Tourist Authority, is printed reversed right-to-left. My own photograph of the same scene is one of my favorites.

> Jack E. Garrett Morristown, N.J.

Correction: In "Cashing in on a Global Economy" (June, p. 26), Deloitte & Touche was incorrectly referred to as Deloitte, Haskins &

Send a Letter

Letters to the Editor main menu. OLT-30 Lists all departments.

OLT-31 Send a letter instructions. Complete instructions on how to send a letter to the editor via the electronic service.

Read letters from other OLT OLT-32 readers.

OLT-33 Send a letter to the editor. You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEED-BACK).

MONITOR

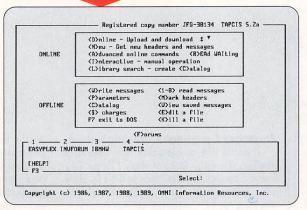
Yeah, That's the Ticket!

Whether the game is called Lotto, SuperLotto, Mega Bucks, Pic-3 or whatever, state-run lotteries allow players to dream of striking it rich by purchasing a 50-cent or \$1 ticket.

Now, those unable to watch the live drawings or who missed the winning numbers in a radio or TV newscast don't have to wait for the morning paper to discover whether they have become a millionaire.

The regional United Press International news wires found in the Executive News Service (GO ENS) regularly report winning numbers and jackpot payouts within minutes of their announcement. You can either browse your state's regional wire (stories are kept on file for 24 hours) or set up a clipping folder to automatically save the stories for reading at your leisure. If you choose the latter option, enter a compound search phrase including the state's name, the name of the game, along with the string "winning numbers" (i.e., Illinois + lotto + winning numbers).

UPI divides the United States into six geographic regions: Southeast, Northeast, Western, Mid-Atlantic, Southwest and Central. Most state assignments are straightforward—Florida in the Southeast and California in the West. There are a few, however, such as Arizona (Western) and Ohio and Virginia (Mid-Atlantic) that aren't so obvious. To learn which region your state is in, select Choice 2, "Review Current News," from the ENS top menu and type "H" for assistance when you are prompted for a wire to





Shareware author: Benner

Script Files for Every Need

BM or compatible users looking for online short-cuts are often steered toward TAPCIS, the IBM-compatible shareware package developed by Howard Benner which automates the use of forums and CompuServe Mail. Later, they learn about script files that offer short-cuts for other CompuServe services.

Examples of such scripts may be found in Library 2, "Scripts and Tools," of the TAPCIS Forum (GO TAPCIS). One popular script is Don Crossman's TPWEEK.ARC. "It's a collection of front-end .SCR files that execute on specified days of the week," explains Crossman. "Included are radar and temperature maps, What's New, and uploads from *Online Today*."

Some members modify scripts for their own needs. C.A. Norton, for instance, took TPWEEK.ARC and rewrote it to access the recently added National Aeronautics and Space Administration news service (GO NASA). The resulting TPNASA.ARC downloads Shuttle Status and other news flashes, Space Center newsletters and weather.

Customers of Quick Way, Quick and Reilly's online brokerage service (GO QWK) can simplify logging on and displaying a portfolio listing with John Boyd's QICKWY.SCR.

And for those who wish to review their online charges to see just how much money TAPCIS saves, John Hammond contributed a front-end script labeled CFREE.SCR.

Editor's Note: Howard Benner died June 8 from complications of malignant melanoma. Benner, considered a pioneer in online communications software, is mourned by countless Compu-Serve members. We will miss him

Then Again, You Could Just Get a Cat...

t's annoying enough to be rudely awakened from a restful slumber by a blaring alarm clock. It's even worse if that obtrusive wake-up call is intended solely for a spouse or roommate when you could remain sleeping for hours.

One solution could be Quietwake, a silent alarm clock manufactured by Designtech International and sold through local gift and novelty stores.

Quietwake attaches to the underside of a pillow. At the appointed time, it vibrates for one minute, arousing the sleeper without disturbing the person next to him or her. It is also an effective alarm for the hearing impaired, according to the manufacturer.

For additional information,

contact Designtech International Inc., 7401 Fullerton Road, Springfield, VA 22153, 703/866-2000.

To discuss this and other adaptive technology that could

aid those with a hearing loss, visit Section and Library 3, "Hearing Impairments," in the Disabilities Forum (GO DIS-ABILITIES).



MEMBER ESSAY

The Best Kind of Radio Network

or the first year I subscribed to CompuServe, all I used it for was to talk on CB. But, that's like buying a new car and leaving it in the driveway so you can listen to the radio. It was time to give CompuServe a real road-test.

I thought I'd try my hand at joining a forum. My wife is a disc jockey, as I was for 22 years before starting my own business doing voice-overs for radio and TV commercials. The Broadcast Professionals Forum (GO BPFORUM) sounded like a good place to start.

Last January, the radio station my wife worked for was sold and she lost her job — an all-too-common occurrence in our industry. We were lamenting the fact that most of the positions advertised in the trade magazines were being snatched up by jocks with "connections" before the trades even went to press. Then it dawned on me. On CompuServe, I've got connections all over the world! Five

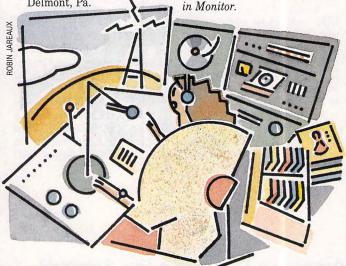
minutes later I was logged on and left the message that Suzy was on the loose. She can now be heard from 6 to 10 p.m. on KRBE in Houston, Texas.

Today, I visit seven forums on a daily basis and six others weekly. I'm always willing to share what I've learned with people who want to know how to put some power in their networking!

Dan "Bear" Swander Delmont, Pa. (Editor's note: Swander says he was left behind to sell the house.)

CompuServe Magazine offers CompuServe members the chance to win 10 hours of connect time by writing a 200-word essay describing how they use the Information Service.

Send essays to CompuServe User ID 70003,4623. Please include your full name and address. Watch for winning essays in Monitor.



Your Word Is as Good as Your Bond

hile desktop publishing may have come of age by pumping out faster and fancier formats, the paper those designs are printed on is usually pretty boring stuff.

PaperDirect, a mail order company, wants to change that.

"We are the only complete mail order source dedicated to office and laser printing, desktop publishing and promotional paper needs," says Warren Struhl, president. "Why kill exciting ideas with dull paper?"

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mium papers can be ordered in quantities as small as 50 sheets or as large as reams or cartons. PaperDirect's sample PaperKit contains various colored sheets for desktop publishers to try out on their office equipment, swatches of available weights and colors, and a catalog. The PaperKit is free with orders of \$25 or more, or can be purchased for \$14.95 (refundable with first order).

For a free catalog, write Paper Direct Inc., 57 Romanelli Ave., South Hackensack, New Jersey 07606 or call 800/272-7377.



Monitor

Edited by Gayle Brown Contributors: Kristin Connolly, Mike Pietruk, Gary Plummer, Randy Rendfeld, Lindsy Van Gelder

Evil Brews

Most of the time, it's grand chardonnay-this and glorious cabernet-that when it comes to the tasting tastes of Compu-Serve's online oenophiles. (That's wine mavens to you, bud).

But someone on the Bacchus Wine Forum (GO WINEFORUM) recently decided that it would be fun to start a thread asking for nominations for the world's worst commercial beer. His own candidates included "the warm half-bottle of Oertel's '92 with cigarette butts in it that I accidentally tried to swig one morning after a lengthy Derby Eve party back in college."

But what really grabbed attention was the message about a local brand of ale which, as an added attraction, at no extra charge to the consumer, reqularly brews whole batches containing "the purest pediococcus strain I've had the displeasure to sample." The microbe, the poor drinker went on to explain, doesn't exactly have a bouquet with hints of vanilla, oak, violets or raspberry. "In taste, depending on the level of contamination, you will notice the sour tang on the sides of your tongue. Also, it has a bitter character [that] sticks to the back of your throat with a long lasting taste of rubber. Needless to say, this bug is a brewer's nightmare."

So you think a word to the wine forum would be sufficient, and people would run the other way when they saw this brand on the shelf? In fact, the guy who posted the message got several requests for samples from people who were curious to do further research. One forum member even said he dreamed, someday, of tasting "side-by-side, otherwise identical brews contaminated with the various bacilli, cocci and phenolic causing agents." It ain't the 1929 Lafite-Rothschild, but whatever turns you on.



Download Images in a GIF

nline graphics techniques continue to evolve as demand increases for high-quality, easily manipulated images. CompuServe has been a leader in this field with its Graphics Interchange Format. Unlike software, which is written to operate only on a specific make of computer, GIF images can be viewed with nearly any system, making them ideal for online exchange among users.

Because of their detail, some GIFs tend to be rather huge files, a psychological deterrent for the first-timer who wants to find something quick to download. But a little searching will uncover quite a number of smaller files that can be downloaded in a minute or less.

A good place to look is the Quick Picture Forum (GO QPICS), one of the five graphics-related forums currently on CompuServe. Smaller images ideal for the beginner include CRT.GIF, from Library 9, "Cartoons & Comics," which humorously examines the problems associated with CRT screen radiation by showing a picture of a shrinking man. Feline lovers might delight in browsing Library 6, "Animal Kingdom," where they'll find the 10K CAT001.GIF (a cute kitten perfect for the cover of your GIF scrapbook) and CAT003.GIF (a black-andwhite illustration of a cat perched on a fence).

Micro GIFs are not confined to the Graphics forums. Nostalgia buffs can, in less than 30 seconds, capture signatures of roaring '20s celebrities Ethel Barrymore (BARRYM.GIF), D. W. Griffith (GRIFFI.GIF), Fannie Hurst (HURST.GIF) and Mack Sennett (SENNET.GIF) from Library 11, "Autographs," in the Coin/Stamp Forum (GO COINS).



Joe Bob's Online America

The first time Joe Bob Briggs used CompuServe's Literary Forum (GO LITFORUM), all he wanted was advice on finding software for writing screenplays. When he checked a few days later, he found 57 messages waiting for him.

That convinced him to stick with it, even though early on he upset a LitForum member. "The guy didn't like what I'd written," he says. But soon other members came to his defense.

Briggs, born John Bloom, started writing at age 15. As Bloom, he has been a sports writer for newspapers and authored a true crime novel titled "Evidence of Love," later made into a television movie called "Killing in a Small Town."

But he is best known for reviewing B movies in "Joe Bob's Drive-In Theatre," found on The Movie Channel, and for two syndicated newspapers columns, "Joe Bob Goes to the Drive-In" and "Joe Bob's America."

Since his first day on Compu-Serve, Briggs has made friends in the forum. "So many [in the forum] are working writers and tend to be involved in problems of interest to other writers. Writing is a lonely pursuit," says Briggs.

"My column is so controversial that papers in small and even medium-sized towns won't print it," Briggs says. "Compu-Serve is so far-reaching. For a lot of people in small towns, it's a lifeline."

Can Bacterial Interpretive Dance Be Far Behind?

A rtist Jean Sobieski paints the destruction caused by computer viruses.

The Miami-based artist creates patterns on his personal computer with graphics programs. He lets viruses run amok on his quarantined system, watching viruses eat away at the screen pixels. With a camera, he photographs the resulting pattern on his monitor, projects it onto canvas and paints.

Sobieski downplays the technical aspects of his work, as well as the prices collectors have paid, although one magazine lists the going price for "virus art" at around \$12,000.

Other recent works by Sobieski also involve computers. For example, he analyzes Wall Street patterns, such as the rise and fall of stocks, of corporate earnings, of the Dow Jones, of gold, silver, the dollar, franc and yen. And from these monetary charts, he creates landscapes.



'Computer Virus 16 (Waves)': Artist Sobieski

"What interests me more than the virus," Sobieski says, "is the fact that the money of mankind has destroyed a lot of landscapes and nature by imposing paint and cement."

One critic referred to Sobieski's economic chartscapes as a fusion between the realities of business and abstractions of art. A critic writing on Sobieski's virus exhibit pointed to the paradox: An artist spends countless hours recreating a computer screen on canvas, as if trying to communicate a schizophrenic love and hate of a hightech new world.

Sobieski exhibited recently at the Helander Gallery, Palm Beach, Fla., and the Hokin Gallery, Miami Beach, Fla.

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Current Hits

by David Peyton

The libraries in CompuServe's forums are filled with thousands of files. The following are a few of the files uploaded in recent months. For a more up-to-date list, check the weekly "Uploads" columns in *Online Today* (GO OLT-3700). To locate a file that has been moved to another library, use the BROWSE command and a wildcard. For example, type BRO *.ARC at any forum prompt. For help in locating files in this list, leave a message to *SYSOP.

AAMSI MEDICAL FORUM

(GO MEDSIG)

Physicians Software—Version 3.5 of Doctor Soft, complete medical practice multiuser software system. Patient charts, history, physical, billing, insurance, ICD-9, CPT, superbills, recalls, appointments, graphics, electronic claim submission, auto-dialer, prescription writer, reports, prints color bills and forums. File DRS3.EXE (743,296 bytes) in Library 12 (Medical Software).

AI EXPERT FORUM

(GO AIEXPERT)

Shareware List—A self-extracting file that contains a database of shareware distributors, both domestic and foreign, along with label-merge and letter-merge BASIC source/compiled software. This is a kit shareware authors can use to get shareware software from development to the market. For MS-DOS systems. File AUTHOR.EXE (205,952 bytes) in Library 14 (Applications Issues).

AMIGA ARTS FORUM

(GO AMIGAARTS)

German Race Game—RACERAMA, a game from Anders Bjerin, a full-scrolling racing game that works in either NTSC or PAL. Program requires a joystick. Game has 10 race tracks patterned after sites in Sweden. File RACERA.LZH (89,600 bytes) in Library 4 (Games).

APPLE ENTERTAINMENT FORUM

(GO APPFUN)

Lotto Assistant—LottoMatic GS for the Apple Ilgs, a program for picking lottery numbers. Shareware quick and easy to use. Works with any game from any state. File LOTTOM.-BXY (40,576 bytes) in Library 1 (Ilgs Games).



ATARI ST ARTS FORUM

(GO ATARIARTS)

Dungeons and Heroes—*Hero II*, a one- or two-player graphic dungeon adventure game similar to *Gauntlet*. This is a combined shareware/demo release. It is a fully functional game in itself, but it will play only the dungeon included in this file. The full version comes with the Dungeon Construction Set and will load and play any dungeon created with it. File HERO-I.LZH (186,112 bytes) in Library 2 (Games).

COMMODORE MUSIC AND ART FORUM

(GO CBMART)

Fast GIF Decoder—A long-awaited fast GIF decoder for the Commodore 64. Now GIF files can be viewed on the Commodore 64's multicolor graphic screen in minutes, not hours. File GIFFY.BIN (4,736 bytes) for BIN format file and GIFFY.IMG (4,648 bytes) for the IMG format. Both files in Library 10 (Graphics Util & GIF).

EDUCATION FORUM

(GO EDFORUM)

Instruction Tool Kit—TutorialWriter is a tool kit for MS-DOS computer assisted instruction. It is shareware that includes hypertext, a menuing system, a help system, multiple-choice tests in addition to sound, graphics, popup windows, quizzes, full-ext control and tests with branching on answers. File TEACH2.EXE (292,520 bytes) in Library 2 (Software).

GREAT OUTDOORS FORUM

(GO OUTDOORFORUM)

Fishing Assistance—A program for MS-DOS systems that helps you determine the best fishing pattern. This shareware version covers walleye fishing only. Also get versions for bass, trout and more. Conditions include



season, time, water clarity, temperature, lake and river. Helps plan a successful trip. Has safety information, logs, library, online help. File FISHEX.EXE (146,912 bytes) in Library 5 (Fishing).

IBM BULLETIN BOARD FORUM

(GO IBMBBS)

Space Strategy Game—Masters of the Universe, a space/strategic door game for RBBS, Telegard and any system capable of creating DOORINFO. Other doorways also may work. Players assume the command of a ship and must slowly work their way from lowly merchant to supreme Master of the Universe. File MOTU10.ZIP (273,408 bytes) in Library 3 (BBS Doors[B]).

IBM NEW USERS FORUM

(GO IBMNEW)

Water, Water Everywhere—Main Break is a new, fastpaced arcade game for MS-DOS systems. Keep ahead of flowing water as you create a maze of passages. Requires CGA and Mouse. File MAINBR.ARC (82,560 bytes) in Library 6 (General Fun & Games [N]).

MACINTOSH COMMUNICATIONS FORUM

(GO MACCOM)

BBS Game—An online Mac BBS game compatible with Red Ryder Host/Second Sight, Mansion and WWIV BBS systems. In *Dungeons*, users will take on the persona of a character and come face-to-face with 100 different monsters, 10 pirates, 20 weapons, missiles and armors as well as face off among themselves in jousting, castle combat, ship combat and general melee. You'll find the game in the file DUNG27 (163,840 bytes) in Library 9 (BBS Systems).

MACINTOSH DESIGN FORUM

(GO MACDESIGN)

Mac Animation—AnimINIT allows you to create full-screen black-and-white animation that will play on start-up on your Mac. This package comes with Animation INIT and one sample animation as well as a short documentation file. Optimized for the Plus, SE and SE/30, but should work on the Mac II series and Portable as well. File ANIMIN.SIT (46,720 bytes) in Library 9 (Graphic Tools).

MICROSOFT APPLICATIONS FORUM

(GO MSAPP)

Window Game—MisterMind, a logic game for Microsoft Windows. It's similar to the board game MasterMind. Try to guess a pattern of colors with the computer giving clues. You'll find the game in the file MRMIND.ZIP (15,093 bytes) in Library 2 (Windows Apps).

NAIC FORUM

(GO NAIC)

Stock Charting—ChartPro, a fully functional stock charting program that creates daily high-low-close bar charts. Requires high-resolution EGA color graphics. Limited version includes about one dozen popular technical studies and costs \$15 to register. Master version has another dozen charts including Point & Figure, Gann, Fib and %R for \$25. Includes example data. File CHARTP.ZIP (174,720 bytes) in Library 12 (NAIC Software).

PRACTICE FORUM

(GO PRACTICE)

Forums and Sections—A complete list of CompuServe forums. Included for each forum is the gateway code, the page identifier, quick reference words, the estimated number of messages per day in each forum and the estimated scroll rate. File FORUMS.LST (16,780 bytes) in Library 1 (Forum Help & Info) contains the above information. A larger archived file, SECTNS.ARC (61,018 bytes) also includes the message section names and the library names in each CompuServe forum.

SCIENCE AND MATH FORUM

(GO SCIENCE)

A View of Earth—TimeGlobe, a program for MS-DOS systems that displays a rotating earth from space. Requires EGA or VGA. Supports a math co-processor if you have it. File TG.ZIP (78,481 bytes) in Library 0 (Student Area).

WORDPERFECT SUPPORT GROUP A

(GO WPSGA)

WordPerfect Screen Templates—Pop-up screen templates for WordPerfect 5.1 by PSW/Power Software. A new version of a memory-resident program that eliminates the need for paper templates by displaying the function key assignments at the press of a hot key. This revision facilitates laptop operation. File WPTEMP.ZIP (10,347 bytes) in Library 1 (WordPerfect 5.1).

Oldies but Goodies

by David Peyton

Following is a list of files uploaded to CompuServe forums more than a year ago that have won the right to be called "oldies but goodies," either by the recommendation of forum administrators or by the number of downloads each file has received. Libraries are constantly being reorganized. If you cannot find one of these files, send a message to *SYSOP to ask about its current status or location.

AMIGA ARTS FORUM

(GO AMIGAARTS)

Amortization Program—A program for the Amiga to compute an amortization schedule and then print it to the screen, the printer or a file. You type the amount borrowed, the rate of interest, the length of the loan and the payment period. It does the rest. File LOAN14.ZOO (13,440 bytes) in Library 10 (Applications).

When Galaxies Collide—A galaxy collision program for the Amiga that shows two galaxies interacting. A publicdomain program by Stephen E. Riley. Use the 60881 as peripheral if you have one. File GALAXY.ARC (19,501 bytes) in Library 4 (Games).

ASTRONOMY FORUM

(GO ASTROFORUM)

Solar System Principles—A program that creates, then animates, a little solar system. It will randomly create up to 60 planets, all with different masses, and put them in orbit around a sun. Then,



in orbit around a sun. Then, using Newton's law of gravitation, it calculates each planet's new position. It also displays the distance from each planet to the sun and the distance the sun has moved from the center of the screen. File SOLSYS.ARC (69,676 bytes) in Library 7 (Astrocomputing).

ATARI ARTS FORUM

(GO ATARIARTS)

Jumping Arcade Game—Jumpster, a relative of Obert. Sound and color arcade style game for the Atari ST. File JUMPST.ARC (23,808 bytes) in Library 2 (Games).

BORLAND APPLICATION FORUM

(GO BORAPP)

Spelling Checker—A Turbo Lightning-based full document spelling checker by Chris Dunford. File LSPELL.COM (18,432 bytes) and LSPELL.DOC (6,125) in Library 5 (Turbo Lightning).

COLOR COMPUTER FORUM

(GO COCO)

Blackjack for the CoCo—A Las Vegas-style blackjack game for the CoCo. This games works on any CoCo with Extended Color BASIC and at least 16K memory. Up to three players against the dealer. Doubling, splitting and insurance bets allowed. File BLKJAC.BAS (8,191 bytes) in Library 3 (Games).

EDUCATION FORUM

(GO EDFORUM)

Teacher's Assistant—Computerized Gradebook for the IBM PC, PS/2 and compatibles. Enables user to record, update, analyze and compute grades. Many capabilities provided and many grading methods supported. File NEWCGB.ARC (132,224 bytes) in Library 2 (Software).

GAMERS' FORUM

(GO GAMERS)

Killer Chickens—Beneath the Saguaro Building, an adventure game where you don't have to kill dragons, just a killer chicken. Your main object is to rob a bank ATM machine. For MS-DOS compatible systems. File BENSAG.ARC (62,872 bytes) in Library 2 (Adventure Games).

GREAT OUTDOORS FORUM

(GO OUTDOORFORUM)

Computerized Bird Songs—A BASIC program that lets you create and play bird songs from sonograms, which you can get in any field guide. File BIRDSO.ARC (18,432 bytes) in Library 8 (Wildlife/Birding).

HYPERTEXT FORUM

(GO MACHYPER)

For the Birds—A HyperCard stack for bird lovers that contains graphics and text information on numerous birds located in North America. File BIRDS.SIT (131,072 bytes) in Library 6 (Reference Stacks).

Where in the US—Geography Primer, a little stack for manipulating the US map. The stack includes 3 "quiz" components—states, capitals and two-letter abbreviations. Also included is a basic charting function for making maps based on geographic data (sales charts, for example). Freeware from Dennis McCarthy. File GEOPRISIT. (14,720 bytes) in Library 3 (Education).

IBM APPLICATIONS FORUM

(GO IBMAPP)

Personal Finance Help—A shareware program that allows you to keep track of all of your bank accounts as well as checking accounts. User-friendly interface. File BAMV25. ARC (220,322 bytes) in Library 4 (Personal Acct [A]).

IBM NEW USERS FORUM

(GO IBMNEW)

Robot Revenge—Revenge of the Killer Robots from Hell, a strategy game written for VGA and MCGA only. It will not run on IBM Model 25 or 30 because they do not support VGA modes. Features graphics fully utilizing VGA/MCGA. File ROBOTS.ARC (78,928 bytes) in Library 6 (Gen Fun & Games [N]).

IBM SPECIAL NEEDS FORUM

(GO IBMSPEC)

Time Teacher—A self-extracting archive. Type CLOCK to unpack a clock game to teach young children how to tell time. File CLOCK.COM (19,676 bytes) in Library 2 (Software).

MACINTOSH ENTERTAINMENT FORUM

(GO MACFUN)

Frog Frenzy—The killer frogs have landed. They have excavated nesting dens and laid thousands of eggs. Evil frog spawn have threatened to take over the planet unless

you can fight through the hordes to the central control and destroy the killer frogs in charge. This is demo of a shareware game for the Mac. File KILLER (66,560 bytes) in Library 2 (Arcade/ Action Games).

MSOFT APPLICATIONS FORUM

(GO MSAPP)

Eyes Only—A Windows program that tracks your mouse movement on the screen with a pair of "eyes." File EYES.ZIP (32,768 bytes) in Library 2 (Windows Apps).

PC MAGNET UTILFORUM/TIPS FORUM

(GO PCM:UTILFORUM)

Formatter—Sydex's Con>Format program, a pop-up concurrent formatter, this TSR program will format disks in the background while you work on something else. You can set your own hot keys using the install program included along with the main program and documentation in this file. Reviewed in *P Magazine's First Looks*, June 27, 1989. Shareware. File CONFMT.ARC (44,482 bytes) in Library 2 (Utilities).

SAILING FORUM

(GO SAILING)

Star Charts—A program for MS-DOS systems and EGA that will draw a high-resolution 16-color star chart. Realistic display shows stars in correct relationship to other stars. Draws stars overhead for any location at any



time on any date. Helps you learn the stars, constellations and star names. Complete documentation included. File STARS.ARC (124,844 bytes) in Library 3 (Navigation Station).

TANDY PROFESSIONAL FORUM

(GO TRS80PRO)

Solar System Movement—Soloz, a CGA graphics depiction that shows the movement of the solar system around the sun. Allows for zooming, tilting and change of speed. File SOLOZ.ARC (26,624 bytes) in Library 6 (MS-DOS Applications).

ZENITH FORUM

(GO ZENITH)

Russian Game—ANTIX, a fast-paced game from Russia by the author of *Tetris*. Combines action with intellectual challenge. Your first challenge is to discover the object of the game. File ANTIX.ZIP (21,753 bytes) in Library 7 (Fun & Games).

David Peyton co-authored How to Get the Most Out of CompuServe, now in its fourth edition. His CompuServe User ID number is 76703.244.

The CompuServer Next Door

FEATURE

CM's Cover Story: Seven Who Make a Difference Ever wonder what makes the online community 'click'? Here are seven people who will show you.

With the nature of the online medium and CompuServe's reputation as one of the

"Service 101" companies, members have logically come to expect immediate responses, whether they're communicating on the phone, via electronic mail or within a forum.

Customer Service, forum administrators and certain information providers are always "on call" via feedback mechanisms and message boards. Underlying these efforts, though, is

yet another, larger network of support: the legion of forum assistants, section leaders, "duty officers" and volunteers.

Whether they're called upon to rescue a sick modem, a sick fish or a player dangling from a cliff in an adventure game, they rise to the challenge. Usually less well-known than the chief forum administrators, these "good neighbors" give of their time and talents to make the online community a better place.

Some might say these people have in common the PKH factor: Patience. Knowledge. Humor.

Patience. They don't get hot and bothered if John Q. User asks a complex question one week, loses the three-page answer and comes back with the same stumper the next week. They toil behind the scenes—often handling multiple questions from a multitude of members—because they consider teaching and helping others intrinsically rewarding.

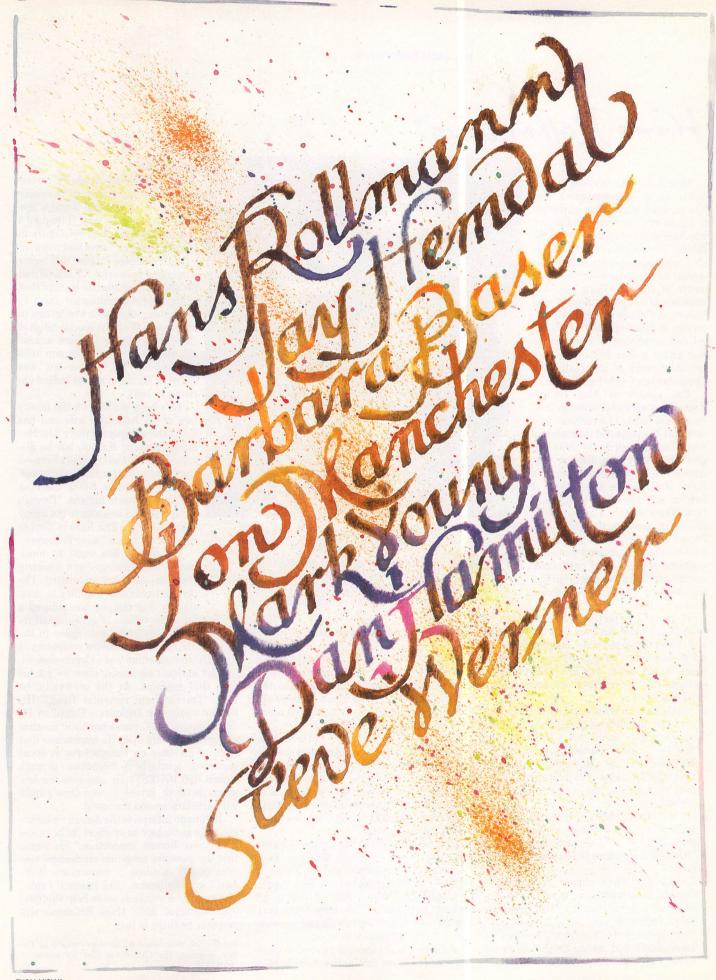
Knowledge. They've developed the ability to communicate effectively and effi-

ciently with all levels of users—whether asking the right questions to nail down a tangly technical problem or answering the basics in a way that makes a new forum member feel at home. Most of them speak from their professions and first-hand experiences. In some cases, this knowledge is specialized and not readily available elsewhere—at least not without consulting fees.

Humor. An unflagging sense of humor about themselves and others is essential as they serve in the online community—they are often calming voices of reason in a sea of divergent viewpoints and occasional flaring tempers. They find it helps to <grin> in their messages.

Oh, and add another H for Humble nature. While many fellow online citizens are indebted to them for "saving the day," these forum volunteers and assistants don't think of themselves as heroes. In fact, they claim to get more from the forum than they give—and are quick to tell anecdotes of how others have helped them. In the big online picture, they tend to downplay their individual contributions as "not a big deal" or "just being myself."

Yet, all of their efforts taken together are what makes CompuServe work. In researching this cover story, we canvassed the sysops themselves for recommendations of forum assistants and members who excel in their level of service to others. Within a few days, we received close to 60 names. From there, we looked for unique unsung efforts from members in varied professions, locations and roles within the forums. On the following pages, you'll meet seven who represent the many who work "wonders" on CompuServe.



Hans Rollmann

Hans Rollmann concedes that he had to warm up to computers. "I'm like someone who's been converted to a new religion," says Rollmann, who logs onto CompuServe from St. John's, Newfoundland. The metaphor may be well-worn, but it has special meaning for Rollmann. The native of Adenau, Germany, is a professor of religious thought and history at Canada's Memorial University of Newfoundland. He's developed something of a second career and a stellar reputation as a valuable source of information on CompuServe's Genealogy Forum.

The success of Alex Haley's Roots lifted ancestral research from an obscure hobby to a national passion that has propelled thousands of Americans to search for their origins. But many soon discover that tracing their ancestors through a Babel of languages and a maze of foreign bureaucracies is no easy task. Three or four times a week, Rollmann accesses the Genealogy Forum and helps budding time detectives unlock ancient documents, suggests sources that will save months of frustration and drops tips from his own broad experiences as a research scholar.

Rollmann's expertise on European history and his facility with German and Latin (indispensable languages for a religious scholar) have made him a popular figure on the forum. His knowledge clearly springs from a deep pool and occasionally betrays a dry wit:

- ▶ Translating a document from German, he explains the difference between a Vollmeyer (a large farm) and a Halbmeyer (a half farm), gives the approximate size in hectares, and the equivalent in acres (1 hectare = 2.47 acres). Such farms, he adds, usually had four horses, cows, pigs and servants.
- He will often drop wry comments into his translations. A reference to an illegitimate child in a birth certificate draws. "Aha!!! The skeletons are coming out of the closet."
- Commenting on a request for payment from East Germany, he warns the recipient that a bank transfer will never get there. Rollmann adds: "... ignore any further requests (up to five years) for money (I know that's bad advice in the Western world, but a necessity in dealing with an



Who: Forum member What: Tracks European branches of family trees; translates ancient ancestral documents. Where: Genealogy Forum (GO ROOTS) Logs on from: St. John's, Newfoundland

Eastern European bureaucracy [even if it is now changing])."

▶ A conversation with this interviewer about the origins of his name elicits an elegant mini-essay on how political tensions between the Mormon Church and the German clergy have hampered access to German birth records.

Says Dick Eastman, sysop of the Genealogy Forum, "Hans' willingness to help is remarkable because he pays a premium (20 Canadian dollars via the Datapac network) to access CompuServe. People will type in an entire manuscript and ask him to translate. and he'll get back to them in a couple of days. He's a real gentleman."

Rollmann settled in the United States in 1972 and earned a master's degree in world religions at Vanderbilt and a Ph.D. at Ontario's McMaster University. He's lived in Newfoundland since 1982. "It is a bit remote," he concedes. "We have bears, caribou, no pollution, cheap lobster and occasionally, a moose wanders into town."

Rollmann attributes his interest in genealogy to the same fascination with history

that led him to his academic career. He's traced his family in Germany back to the 1500s and found a few surprises along the way. "I thought I was the first one from my family to come to America," says Rollmann, in a lightly accented English that seems a hybrid of his native Rhineland and his adopted Canada. He learned that a great-great-grandmother came to the states in the 1850s and settled in Minnesota. With the special relish of those who root for treasure around the ancestral vine, Rollmann tells how one of her sons-in-law was killed in Minnesota's last Indian uprising in 1862.

He's been working on the family tree of his American wife and has found the unexpected there, too. Her family name is Karnes, but he discovered that it was originally Kern-a German name. Her American ancestor first settled in North Carolina and later moved to Indiana. "Through CompuServe, I was able to get a copy of the will of the first Kern to come to the United States," says Rollmann.

Computing has made as much impact on genealogy—and scholarly research—as it has on writing. The personal computer's ability to sort, classify and compile has reduced a lot of the tedium of genealogical re-

search. Like many of his colleagues in the humanities, Rollmann resisted computers at first. His first machine was a Commodore 64, but his enthusiasm soared when he got his first IBM machine. At the university, he says, "I'm the local computer freak." His current equipment includes a Canadian PC '386 clone, a VGA monochromatic monitor and an 80MB hard disk. He emphasizes that most of his time on CompuServe is spent searching scholarly publications through IQuest (GO IQUEST). He also uses the academic network Bitnet to exchange papers with scholars around the world.

Rollmann interprets the American enthusiasm for genealogy as an effort "to be linked to a wider human connection." He warns that the quest for ancestors can become consuming. "It develops a momentum of its own," says Rollmann, "like baseball cards." The next time you need some help shuffling your ancestral deck, Hans Rollmann will probably be there to help.

Joel Dreyfuss writes about the computer industry for Fortune magazine. His CompuServe User ID number is 76004.2336.

Dan Hamilton

Dan Hamilton is a self-confessed "news junkie." The assistant sysop of the Journalism Forum reads "six or seven daily newspapers," tunes in English-language broadcasts on short-wave radio, and keeps several Executive News Service folders clipping away. His "addiction" isn't just to news, but to how news is made, who makes it and how it's reported. Many journalists stay abreast of what's up, but Hamilton also tracks how it goes down.

JForum visitors meet Hamilton quickly, if not through his welcome message, then through one of the discussions he starts on the message boards. Questions of journalistic ethics intrigue him.

"I like to play devil's advocate, stir up some controversy," he allows with a smile that flashes as often in person as his online <grin> appears on the message boards. "I keep things

rolling."

In April, *The Washington Post* issued an apology because one of its reporters had telephoned a Poindexter trial juror during the trial. Soon JForum was buzzing with a Hamilton-instigated debate on the ethics of contacting jurors.

As one of three assistant sysops on a busy forum, Hamilton spends most of his time on the message boards—steering discussions and offering his "two cents" whenever a strong point of view is needed. Although his online time is limited (it's a long-distance call from Cape Cod, Mass.), he pops in and out with TAPCIS software, spending a total of about an hour a day on his forum duties.

The combination of computers and journalism came naturally to Hamilton. When he left his auto repair business (he's a certified Porsche mechanic) to pursue a journalism degree at Boston University in 1978, he realized computers would be crucial in his new field. "I took a course and the bug bit," he says. From playing with an early Radio Shack Model 100—then the quintessential

n campaign closes

ROBERT GOLDSTEIN

Who: Assistant sysop
What: Moderates heated discussions; talks "shop" with
journalism peers and students; welcomes new members.
Where: Journalism Forum (GO JEORUM)

Where: Journalism Forum (GO JFORUM)
Logs on from: Cape Cod, Mass.

"reporter's computer"—it was a simple step to dialing up the fledgling CompuServe system back in 1981.

"I wondered what was at the other end of the phone line," he says, displaying his characteristic curiosity. "I looked for people with similar interests and eventually I saw a message from Jim [Jim Cameron, JForum sysop] announcing a new forum for journalists. I corresponded with him and generally made myself such a nuisance that he decided he ought to bring me into the fold." Hamilton's been an assistant sysop since November 1985.

When Cameron is overseas, often a month at a time, Hamilton takes over JForum. "Dan's one of the brightest, most articulate and funny people I've met," says Cameron. "He's always willing to go the extra mile to answer members' questions or to steer them to someone who can."

In return, Hamilton says, what he enjoys most about the forum is "the vigorous debate on how the job is done. I used to go to the IRE [Investigative Reporters and Editors] conferences, and the best part was hanging around

and talking about the job with other working pros. You can do it once a year at a conference—or do it everyday online."

Hamilton also welcomes commentary from those outside the profession. "It can be a great opportunity for the 'real world' to take us to task on how we do the job," he says, citing a recent forum crossfire on media bias in coverage of the gun control issue.

Even as he attended journalism school, Hamilton worked as a columnist and free-lance reporter for *The Register*, a weekly newspaper published in Yarmouth, Mass. When he finished his degree in 1981, he became associate editor—a job that entailed as much reporting as editing. Eventually he rose to managing editor, even serving an eight-month stint as editor-in-chief.

News on Cape Cod often involves stories about land use, water quality and other environmental issues. "The Cape is a fragile ecosystem," he explains, "so it's also a hotbed of environmental research. If there's an environmental problem anywhere in the Northeast, it's probably been studied on Cape Cod."

When Hamilton isn't glued to a CRT at home or in the airy, skylit offices he shares with an environmental consulting firm, he's likely to be cycling or sailing—enjoying the outdoor life of Cape Cod. No surprise he serves as a trustee of a local conservation trust.

Ultimately, his interest in the environment and his expertise as an investigative reporter converged in a second career change. Last fall, just before his 39th birthday, he left *The Register* to found *Environmental Perspective*, a specialized circulation newsletter on environmental issues and regulations in New England.

On the forum or on the job, Dan's the man who spreads the word.

Patricia Harris and David Lyon are free-lance writers based in Cambridge, Mass.

Steve Werner

In the competitive world of desktop publishing, Steve Werner could hoard his knowledge to make a killing. He could charge hefty fees for his expertise. He could write manuals filled with answers. Yet Werner offers his wisdom readily and freely by volunteering in the Desktop Publishing and Adobe Forums.

As manager of the electronic media division of Central Graphics, a San Diego-based service bureau (the generic name for a general services graphics company), Werner stays abreast of product developments and industry trends. For instance, in April, he was telling another forum member about the long-awaited Mac version of the technical document processor Frame-Maker, or FM, which does word processing, page layout, object-oriented graphics, math processing/typesetting and management of long, complex documents across a network of mixed Macs and Unix machines. "FM looked pretty impressive when I saw it on a NeXT machine," he added.

Werner combines his fascination for the industry with a love of teaching to help people solve desktop publishing problems. He has be-

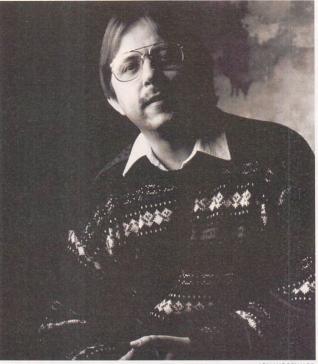
come a resident expert on PostScript, a pagedescription language that specifies text and graphics on a page and then communicates it to a printer.

His messages often go deeply technical, making sense only to those already at his level of knowledge. Yet, if someone asks a basic question, such as "I got this error message. How come my job (project) didn't print?" Werner answers in terms that the end-user can understand.

"Steve's always the one who saves the day," says Brad Walrod, Desktop Publishing Forum sysop, "He can explain clearly and step-by-step. He can talk to all levels of users." Werner expresses it modestly, saying that he is just naturally helpful. "I like to share information. I don't feel protective of it," he says. "It's my philosophy that people should be empowered to do things as much as they can.'

Werner visits both forums daily, using software that allows him to scan the message boards and then write his severalparagraph-long replies offline.

He especially enjoys participating in



JON WOODWARD

Who: Forum member What: Draws on professional savvy to help all levels of users. Where: Desktop Publishing (GO DTPFORUM) and Aldus (GO ALDUS) Forums Logs on from: San Diego, Calif.

what can become "heated discussions" on everything from critiques of new software to the function of a service bureau. Werner believes the role for a high-quality service bureau is "to be an integrator, an educator and an innovator, as well as printing out files, scanning and (performing) other service functions.

Another important part of joining in, he says, is "you have a chance to network with colleagues, people who are working in your field with your level of knowledge and expertise. It's different in your own community you cannot just call up a business competitor for advice. But it's easy to have colleagues around the world because I don't feel any sense of competition with them."

Werner was quick to earn recognition as outstanding helper in the former Macintosh Business Forum and then in the Desktop Publishing Forum, because he jumped at opportunities to answer questions. Many people in the forum just read the messages, he explains. "But because I've worked in desktop publishing from the beginning, I had the confidence (to respond)."

Werner graduated from the University of Washington with a degree in psychology, never giving computers much thought. As a child, he stored information like a computer, reading volume after volume of the encyclopedia. "I found that I like graphical things. Another part of me is technical-scientific that likes to understand things. And there's another part of me that's peopleoriented, that likes to teach and share and learn," he explains. "So here I am in a field where I can bring the three parts of my personality together.'

Werner joined CompuServe's Model 100 Forum in 1983, when he got his first computer. His interests also were turning to the printing specialty of telecommunications, forerunner of desktop publishing.

He used to hang out in computer stores and devour computer literature. About the same time, he moved from Seattle, where he worked in a small printing company, to San Diego to work at Central Graphics. The company was in the early stages of desktop publishing, so his Seattle experience proved valuable. "There was nothing written about desktop

publishing at the time. You had to learn on your own. Those of us on the forefront had some bloodied hands along the way," he says.

Werner also teaches computer graphics courses part-time at Platt College, a private graphic arts and drafting school in San Diego. When he's not volunteering in a CompuServe forum, working, teaching or absorbing the computer manuals and magazines piled on his coffee table, he enjoys swimming, walking and working in his church. Still attached to the Pacific Northwest, he displays a picture of Mt. Ranier above the desk in his apartment, where he does most of his online computing and enjoys the company of his ever-present feline, Espresso.

Eventually, Werner sees himself spending more time teaching and consulting. As for being a CompuServe forum hero, it's a tag he never considered. "I don't think of myself as being a hero," he says. "I just think of myself as being myself."

Jennifer Lowe, a free-lance writer based in Orange County, Calif., is a staff writer for The Orange County Register.

Barbara Baser

In the early days of online gaming on CompuServe, text adventures attracted a loyal community of enthusiasts to what was a somewhat literary pursuit. Games rewarding arcade-conditioned motor skills had not yet crept into homes and headlines. Mental prowess reigned supreme.

Gamers' Forum Associate Sysop Barbara Baser, office manager of a Southfield, Mich., computer software firm, recalls those days with relish. She had never heard of CompuServe when her boss gave her a subscription kit as a gift in July 1982.

While her boss may have had some regrets about letting the CompuServe genie out of the bottle and onto Baser's hard disk, members of the Gamers' Forum have for years enjoyed her patient, instructive counsel as the aptly named Ms. Wiz.

Barbarian had been her first online persona—a variation of Barbarias, a nickname from her office co-workers. But since it was gender neutral, "people started calling me a 'he' and I said 'oh no, no, no, we can't have that.' " The Wiz, her second choice, also proved gender vague. So one night over a cup of her ever-present chocolate

nocturnal libation, "Swiss Miss," Ms. Wiz rhymed her way into member address books and forum lore.

Messages from Ms. Wiz are a welcome beacon for wayward adventure gamers. As keeper of the hints and maps archives, she helps puzzled gamers escape from the labvrinthine depths of story plots. As the recorder of all subscribers who have completed games online, she also unites aspiring adventurers with those who have gone before and survived. Best of all, she is known as a mentor who can pass along clues without revealing more than need be said, a must when nerves are frayed, danger looms and pride is at stake.

Besides a grasp of the games and their structure, Baser's advice benefits from her "patient teaching mode," gained during a stint of installing personal computer systems

in rural Michigan.

Before becoming a forum administrator, Baser was a forum samaritan, helping people out, uploading things to the library and writing stories for the newsletter.

Review the posting times for her daily



JUNEBUG CLARK

Who: Associate sysop What: Guides puzzled players through labyrinthine depths of adventure games. Where: Gamers' Forum (GO GAMERS) Logs on from: Southfield, Mich.

> messages and you'll discover she's quite the night owl, matching wits with "left coast" subscribers on her ET schedule. The two hours a day at work and three hours a night she spends on forum business are "a combination of 'it's gotta get done' and insomnia.'

> But the long hours are also a function of her philosophy. She pursues online interaction the old-fashioned way, namely, in real time, rather than via auto-access programs. "If people send me a message when I'm online, they get a message back.

> "One day I bumped into a friend whom I hadn't seen online for a long time. He explained that he was recovering from a stroke and needed help with an adventure game. I answered his question, offered condolences and asked why he was playing adventure games rather than doing some kind of therapy. He responded that the physical part of his therapy was over, but that synapses controlling his brain-to-hand motion had not recovered. The doctor had suggested he play adventure games to get his mind and hands working together.

"He thanked me for the game 'walk-thrus'

I'd written for *The Electronic Gamer*," Baser recalls. "I'd written them initially just for fun. When I found out that they'd actually helped someone recover, it made me feel good."

Patricia Fitzgibbons, chief sysop of the Gamers' Forum, has "always relied on Barb's judgment. Although Barb is gregarious, she isn't a 'gusher' or someone who indulges in 'flaming' (overly emotional manner of speaking online). She's a thoughtful, level-headed individual with an unflagging sense of humor about herself and others.'

When she's not directing international gaming traffic, Baser enjoys listening to classical music and playing the piano. An audio card for her PC is a well-used recent acquisition. "I'm just in love with that thing," she admits. "I've been hanging around the IBM New Users Forum, and contributing music I've programmed."

A spinet piano, Yamaha key-board, IBM System 2, Atari ST and a sofa all share the 6- by 9-foot room she had built off the living room to consolidate her various pursuits. Until just recently, the computers had been the centerpiece of "a kitchen table I hadn't eaten a meal on for eight years," Baser adds.

And while forum support and a full-time job would seem to tax all her available time, Baser is excited about relaxing with a new commercial game called Loom. A product of Lucasfilm games, Loom, an all-graphics adventure game, is perhaps the antithesis of the all-text games where she got her start. But it is not without allure. "You just wander around and experience things, without worrying that you'll lose the game or your possessions. In fact, you can never die in the game, which I thought was kind of refreshing," she says.

Games that cater to the incredible graphic power of the newest machines were inevitable, Baser agrees. "It's a bit like television taking over radio," she suggests, "you surrender some of your imagination.'

But as long as there are others like her online who "bemoan the state of the art," you will continue to find forum discussions that begin in the wee hours of the morning: "Whither adventure games?" and are signed Ms. Wiz.

Michael Mooney is a free-lance writer based in Boston. His CompuServe User ID number is 76004,2345.

Jon Manchester

Jon Manchester cannot walk past a greeting card shop without going in and at least browsing. Usually, he buys a few cards, but after he spent \$50 on a single "Hallmark hop" last winter, his wife, Laura, had to put him on a card budget. Still, the cards are an essential ingredient for what Manchester calls ITC (Intensive Card Therapy) for friends with cancer.

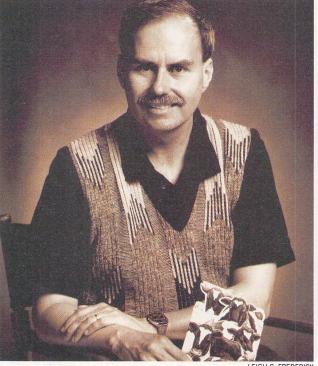
Manchester, a marketing manager for E.I. Du Pont de Nemours & Co. in its Newark, Del., corporate center, brings hope and humor to many cancer patients, most of whom he has never met in person. Through the Cancer Forum on CompuServe, he offers his friendship, and through the mail, he offers his funny cards for everything from holidays to hospital stays.

The trademark of a "Manchester card" is not flowers or cartoon characters—but cows. Legend has it that a friend who owned a cow slipped and fell—and then her cow fell on top of her. Manchester wanted to send a get well card and happened to spot one with a cow theme as a joke. "Then, I started finding them again," he says. Manchester now has hundreds of "cow cards" and has branched out to cards with an appliance theme—related to his hobby of collecting old wringer washing machines.

His humor is a hit. Members write their thanks on the message board: "I just got your card and laughed my head off!" Or "Thanks for the St. Pat's Day card. How you ever find these cards is a mystery to me." Or "I was particularly 'moooved' by your thoughtful card."

Underlying the humor is a caring spirit, a sort of online "good neighbor," who always seems to be there. To one member, he writes, "I hope things went OK with you today. If I recall right, I think you were having some tests today, too. Thinking of you." To another, "Sorry to hear about Chuck's mom. I hope things improve soon. BTW, if you don't mind, could you plex me your address? I like to send cards occasionally ..." And to a parent: "It sounds like your son is quite ready to do battle. That's great. We'll be pulling for him. Do you mind if I ask his name? I just know him as Lynn's son and it would help me if I had his name. Tell him I said hi." Every message is signed "Peace, Jon."

If Manchester seems especially adept at supporting cancer patients and their families, it's partly due to first-hand experience.



LEIGH C. FREDERICK

What: Uplifts cancer patients and their families with humorous greeting cards.
Where: Cancer Forum (GO CANFORUM)
Logs on from: Newark, Del.

Laura was diagnosed with breast cancer in October 1986, and within five days had a mastectomy. After Laura weathered six months of chemotherapy, the Manchesters, parents of eight- and 13-year-old girls, were hopeful Laura was cancer-free. But in January 1989, her physician discovered the cancer had metastasized throughout her bones. Jon, who has participated in the Cancer Forum since it opened in 1988, was grateful for the online support at that time.

Jon and Laura have also been active in an in-person, hospital-based cancer support group in Newark, but he says participation in the forum has changed his outlook on life and on cancer. The sheer act of writing messages online is a kind of therapy, according to Jon, as it helps cancer patients and their families focus on their feelings and capture their thoughts in a way that verbal communication usually does not allow.

"What we're attempting to do in the forum is to see how we can live with cancer instead of waiting to die from it. And many won't die; they will be cured," he says, in an upbeat tone. "It's exciting to try to combat a

common enemy."

And it is this common enemy that has created such a strong sense of community in the forum. "One member described it as a perfect example of communism, since you can take what you need and give back what you can," Manchester says.

It comes as no surprise that Manchester was part of a team effort to support Alfreda Goodrich, known on the forum as Alfie, who was hospitalized last winter at the MD Anderson Cancer Center in Houston, Texas. She only agreed to the hospitalization if her doctors would allow her to bring along her computer and modem. But the equipment first had to be sterilized. Then, the computer would not work properly. With the help of Sylvia Steiger, an RN at the hospital who is also a forum member, Manchester and others maintained an online vigil and offered suggestions to get the sterilized computer up and running.

Meanwhile, Manchester was in the midst of an "ITC" session for Alfie, inundating her with humorous greetings each day. In a forum message to Nurse Steiger, Manchester explained his strategy: "I occasionally send cards addressed to her on the 12th floor, although I send the most important ones to you (to give to Alfie). I figured if I sent some to the

floor and some to you, there would be a good chance of getting some through."

When pressed, Manchester admits that he seems to have a mission on the Cancer Forum. No job he has ever held has given him that sense of mission. "My cards and messages are really inconsequential in the overall picture," he says, "but it is something I can contribute."

Although Manchester volunteers much of his time and emotional energy to the forum, he insists that what he receives in return is even greater. "Knowing there are people who understand my concerns and who take a real interest in me is a comfort. I can share how I feel and know someone is listening."

Cathryn Conroy, based in Gaithersburg, Md., is a contributing editor of CompuServe Magazine. Her CompuServe User ID number is 70007,417.

Editor's note: At press time, Laura Manchester's condition was stable and the bone pain controlled with medication. Regrettably, Alfreda Goodrich died May 7 from a stroke following a bone marrow transplant at M.D. Anderson.

Mark Young

Mark Young never sees the people he helps, but then again he isn't looking for tangible rewards. The opportunity to share his knowledge with those who are wrestling with balky modems and software problems provides his satisfaction. Young's unique gift is his ability to explain technical concepts in a way that brings them to life. "When people ask questions, they want to know not only how, but also why," Young

Young has been helping people with computer problems ever since he joined the staff of Chemeketa Community College in Salem, Ore., as a laboratory assistant 10 years ago. When he moved from the academic to the administrative end of the college as a systems programmer, he missed helping students grapple with computers.

About three years ago, he discovered CompuServe and now fills that void with his participation in sev-

eral forums. Young's name and his clear explanations of knotty technical problems are familiar to regulars on the Practical Peripherals, Datastorm, TAPCIS, IBM Communications and Zenith Forums.

Sysop Paul Hansen recruited him last fall as assistant sysop for the newly organized Practical Peripherals Forum after following his trail of messages in several other forums. Says Hansen, "Mark has a knack for communicating complex technical issues in a way that doesn't go over the heads of people who are not technically inclined. Mark is so active that he's everywhere. When he gets a question that's over his own head, he never tries to fake it. He has a balance that few, if any, of the other people I've encountered on CompuServe have."

In the PPI Forum, for example, one of Young's dozens of messages is to a member who is having modem problems. He asks the user, Bryan, "If you start up your communications program and then key in ATDT555-1212 (change this to the number you're trying to dial) and press Enter, does this hand-dialing produce a 'little noise like a



ROBERT PALMER

Who: Assistant sysop/forum member What: Solves modem mishaps and connection catastrophies. Where: Practical Peripherals (GO PPIFORUM). IBM Communications (GO IBMCOMM) and Datastorm (GO DATASTORM) Forums and more. Logs on from: Salem, Ore.

> space pistol' and fail to dial?" If so, he then advises Bryan to "Key in: ATS11? (yes, a question mark after the eleven) and press Enter" and continues with his explanation.

> At the end of the message, he asks, "What does it show?" since questions about connectivity involve much trial-and-error. Says Young, "Sometimes it takes several exchanges of messages to define a problem, and a few tests to narrow down the possibilities to where we have time to compose the reply without totally confusing the person. And sometimes, when a half-step of progress is made, it isn't perceived as such." He never tires of encouraging users to "Please come back with a few more details" and often signs off with "Best success!" as he doles out specific technical solutions.

> Grizz Jordan, another of the many Young has helped in the PPI Forum, describes him as "a wonderful teacher with a natural gift." Jordan had asked Young for help when he could not upload, download or communicate when using Telix and Procomm at 2400-baud (at 1200-baud, everything was fine). Young asked him questions to narrow down possible

causes of the problem, ranging from incorrect terminal default settings to a conflict within Jordan's system, and in the process Jordan "learned a lot about duplexes."

Young's replies make it sound as if the answers flow easily, but he says he often revises messages several times to get the wording just right. He downloads messages, composes replies on one of his PC '286 clones and uploads the responses nightly. Young spends at least two hours per day on PPI matters, and often another hour or more on the other forums. You can also find him on Zenith Forum's Saturday Night Live and on PPI Forum's Thursday night conferences.

One of Young's computers will eventually host a bulletin board system (BBS) linking people interested in unexplained phenomena such as UFOs, out-of-body experiences and extrasensory perception. Young's fascination with the paranormal was

piqued by discussions in Section 10 of the Issues Forum.

He goes online from the back bedroom of his second-floor apartment, a few blocks from Chemeketa Community College on the eastern outskirts of Salem. This strategic location gives him a commute that would be the envy of everyone from his native Los Angeles. It also helps explain how he finds the hours to devote to forum matters, and time to renew himself through his other primary interest, a non-denominational church.

In person and online, Young is modest about the level of technical expertise he's attained and the thousands of users he's been able to help through the forums. But Sysop Hansen isn't. In a recent message to Young, Hansen summed up the feelings of many: "You have come such a long, long way and do such an outstanding job of answering user questions that I just enjoy sitting back and watching your good work."

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications. His CompuServe User ID number is 70007,431.

Jay Hemdal

Pardon the pun, but Curator Jay Hemdal's office is stuffed to the gills with marine memorabilia: volumes of aquaria magazines, a framed photograph of a wet-suit-clad Hemdal gripping an eight-foot shark, and a charmingly grotesque amphibious monster mask that doubles as a microscope cover. Outside his door at the Toledo Zoo Aquarium sit some of the more than 40 tanks that harbor creatures from all corners of the world's oceans. So somehow it seems perfectly normal that he is leaning back reminiscing about . . . well, fish.

"Someone gave me a pair of goldfish when I was three years old," he says, recalling that his intense childhood interest in dinosaurs ended abruptly with the discovery that he'd never see a real one. A fascination for the more plentiful animal later evolved: "I got my first saltwater tank when I was 10. I've pretty much had tunnel vision ever since."

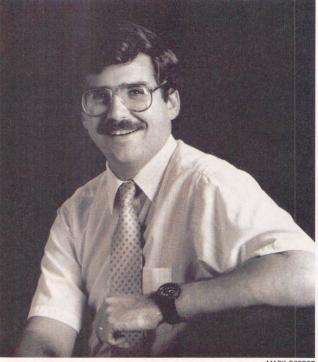
Which is fortunate for any CompuServe member who has ever happened upon the Aquaria/Fish Forum (known as FISHNET) with the tale of an ailing angelfish or sick cichlids. Hemdal is the tireless captain of the forum's Duty Officer team—a sort of online paramedic squad for diseased aquatic crea-

tures—whose job is to field emergency queries from a Problem Assistance message section and shoot back prescriptions for recovery.

Speed is essential to the operation. According to Sysop John Benn, the team is known for its ability to post the crucial replies in less than six hours. Says Hemdal: "A high percentage of the questions people have about their home aquariums can't wait. If someone sends a message saying 'All my fish are dying,' and you answer back a day later, you may have solved the problem for fish that are already dead."

Hemdal spends more than 10 hours a week on a monthly rotation in FISHNET, dispensing "off the cuff" advice gleaned from a lifetime of keeping the pets alive. While in college, he worked in tropical fish stores and dealt with countless "I've got a sick fish" phone calls. Many of the articles he has penned for hobbyist magazines reside in the forum's libraries, where he often refers cases of commonly reported ailments.

Hemdal came to his present calling after several years managing displays at the famed Shedd Aquarium in Chicago. "I



MARK OBERST

Who: Duty Officer Squad captain
What: Rescues sick fish around the clock; delivers
personalized prescriptions.
Where: Aquaria/Fish Forum (GO FISHNET)

Logs on from: Toledo, Ohio

started there as a reef tank diver, the person who feeds the fish during public demonstrations. It was potentially a glamorous job, but," he muses, "it was lacking in depth."

He's now settled into a position at the nationally ranked Toledo, Ohio, Zoo, and knows his way around FISHNET. But logging onto the forum for the first time more than two years ago was a real eye-opener. "The first year, I was using CompuServe as a peephole, only seeing certain things: I could read library files and messages, but I didn't know what a forum was."

Hemdal soon caught on, and began doling out guidance on his own. Sysop Benn took notice and asked him if he'd be interested in formalizing an arrangement. Hemdal agreed, and the Duty Officer concept was created. It helped cut down on the kibitzing traffic: "Often there is more than one right answer. But you've got to give *an* answer, not 10."

Also in the name of efficiency, Hemdal advocated the use of the "problem report," a questionnaire template members follow in posting their crises. It prompts for a variety of information on tank size, fish types, feed-

ing methods, and water quality, and eliminates the need to play 20 Questions with the report submitters, most of whom are first-time visitors.

"We can't give answers without it," he says. "I have to picture what their problem is. Questions are often posed in such a way that important information is left out. For example, a person might say 'My Gourami has fin rot. His fins are a mess.' So we have an exchange of messages and think I've solved the problem, only to find that the *piranha* in the same tank has no fin rot. So I say, 'Hey, it's not fin rot. It's aggression.' "

The problem report is also an excellent means for weeding out aquarium characteristics that could be trouble later, according to Hemdal. "You save the fish, but you also may suggest a different food, light source or filtration system."

Some might think it fishy that Hemdal keeps on making his appointed Duty Officer rounds without so much as a "thank you" or feedback on how his answers stood up. Part of the problem, he says, is the solutions he offers might be long-term. "Some are ongoing, taking months. You'll have to start doing this or that to your tank, making this many water changes this often, over two months, three months,

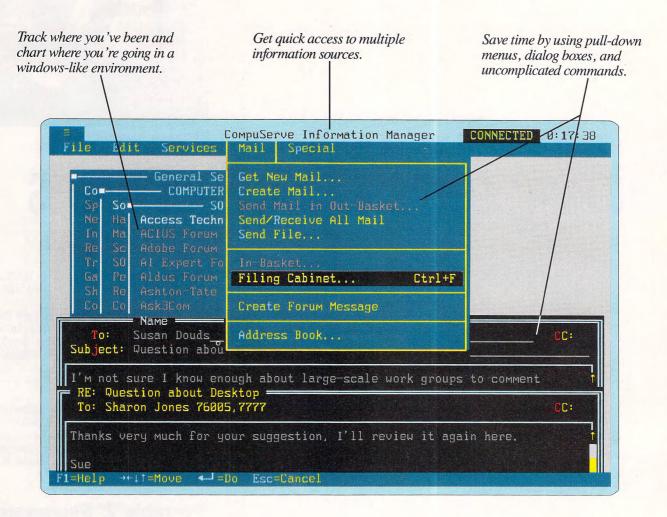
whatever. It's rare for me to say 'Add chemical A' and the next day the fish are all better."

Then again, it could be the cold, clammy, slimy nature of the pet, which Hemdal admits doesn't quite elicit the same mammalian mothering instinct as a puppy or kitten. "It's hard to develop warm emotions for a fish. They appeal to humans on a different level. People say, 'I should change the water, but I'll just buy new fish next Saturday.'"

But the lack of recognition from members and cuteness on the part of the fish is all just, um, water in the tank to Hemdal. "I do it because if I'm not helping people, at least I'm helping their fish. The whole idea is that we're here to keep the animals we exhibit alive through their natural life span in the wild. So anytime you've been put in charge of a captive animal's well-being, it's a major responsibility, whether it's a fish in a bowl or a shark in a tank. Your husbandry skills had better be adequate, or you don't have any business owning it."

Christopher J. Galvin is an assistant editor of CompuServe Magazine.

Easydoesit.



Welcome to the wonderful — and wonderfully easy — new world of CompuServe. It's called the CompuServe Information Manager, and it's a program designed to let you use the power of your MS-DOS personal computer while you take advantage of the resources of CompuServe.

The CompuServe Information Manager is easy to use because it lets you utilize a windowed PC interface with pull-down menus and

dialog boxes. It even allows you to do several tasks (on CompuServe) at the same time.

Plus, we've made it easy to get started, too. The CompuServe Information Manager, and its Users Guide, is being offered to CompuServe members only at an introductory price of \$24.95—and that includes a \$15.00 usage credit. To order, just type GO ORDER at any! prompt.

And you'll learn how the CompuServe Information Manager can put you on easy street.

CompuServe



His laptop is 'indispensable': Miller

Catching Some Z's on Your Knees

COMPUTING SERVICES

CM's Computing Services Credo: Control-G tolls for thee.

> Portable Power: Zenith MinisPort

Handheld Hercules: Atari Portfolio, page 24

Zenith Forum guides owners of the first, most powerful and longest-lasting laptop computer.

Dr. Kenneth A. Miller of northern Wisconsin depends on his Zenith MinisPort laptop as much as he depends on his stethoscope. He carries the laptop with him wherever he goes—on hospital rounds, to For those who call out for advice, the clinic, to the office and homeanswers, even mere companionship performing drug interaction analyin a discomfiting computer world, ses, making occasional MEDLINE we throw you the online rope that searches, word processing and even connects to the main. No man is remotely accessing his desktop coman island unto himself. Herein the puter. Miller calls the MinisPort "indispensable."

Zenith Data Systems is credited with inventing the industry's first IBM-compatible, battery-operated laptop computer, the Z-150. Following on its heels was the Z-171, which offered the first backlit screen, and the Z-181, which featured a whole new design called the "clam shell" and a dual floppy disk drive. The Zenith laptop computers on the market today are smaller,

lighter and even more powerful with greater mass-storage capacity, VGA graphics and 2400-baud modem capabilities.

One thing that hasn't changed is Zenith's reputation for durability and reliability. A case in point: CompuServe member D.L. Williams recently made the mistake of storing his SupersPort 286 in an airline's overhead compartment. "The next passenger opened the compartment to place his luggage in, and the Zenith did a 7.5-foot dead drop into the aisle on its side." With visions of destroyed data and dented hardware, Williams booted up the computer when he

returned to the office and the machine worked perfectly (albeit with a slight lean to

It is because of Zenith's ruggedness that the US government ordered, in 1985, 19,000 laptops for the Internal Revenue Service. Two years later, the Department of Defense ordered some 90,000 laptops at a cost of more than \$100 million for use by all the armed

All manufacturers of IBM-compatible equipment compete not only with each other, but also with Big Blue itself. Convincing potential users that the clone is just as good if not better than the IBM machine is a

Portable 'Z' Shareware

Video Display Editor: A WordPerfectcompatible laptop word processor that is small, fast and easy on the battery. (VDE152.ZIP, Library 6, "Applications").

PC-File 5.0: Buttonware's best-selling database manager. In stores it sells for \$129.95; on the Zenith Forum it is shareware. (PCF501.ZIP, PCF502.ZIP, Library 6, "Applications").

CISCO: Short for CompuServe conferencing, CISCO allows inexpensive participation in all CompuServe conferences. It's a fully automated program designed for use by absolute novices (CISCO.ZIP, Library 2, "Help and Information").

Tips and tricks: Technical information that is not available anywhere else (LAP1.ARC, LAP2.ARC and LAP5.ARC, Library 2, "Help and Information").

A Laptop for Every Kneed

The TurbosPort 386e was designed for power users who demand portability. It packs 20 MHz Intel 386 zero wait state speed to boost financial, engineering and scientific applications, as well as popular MS-DOS programs. With a 40MB hard drive for plenty of mass storage, it is an ideal machine for research and other dataintensive applications. A 2400-baud internal autosync modem is standard. The retail price is \$7,499.

The SupersPort SX offers Intel 386 Light but no lightweight: MinisPort power for advanced applications without the hefty price tag. Features include a 16 MHz 80386SX microprocessor, 32-bit internal processing combined with a 16-bit external data bus, 1MB RAM expandable to 8MB RAM and an optional 2400-baud internal modem. The retail price for the Model 100 with its 100MB hard disk drive is \$6,499, while the Model 40, which offers a 40MB hard disk drive, sells for \$5,499.

The SupersPort 286e is the laptop computer for business, sales and technical professionals who spend a lot of time on the road. In



RAM, 3.5-inch, 1.4MB diskette drive, fast capacity mass storage and an optional 2400baud internal modem. The retail price for the Model 40 with a 40MB hard disk drive is \$4,999; the Model 20 with a 20MB hard disk drive sells for \$4,699. The lightest, smallest and least expen-

addition to VGA resolution and battery-

powered 286 performance, it offers 12 MHz

80286 processing speed, up to 3MB of

sive Zenith laptop is the MinisPort, a notebook-sized computer that weighs just

5.9 pounds, but can handle MS-DOS applications, such as word processing, spreadsheets, database and time management. Ideal for journalists, students, educators and executives, this laptop is battery-powered and has room for an optional internal 1200-baud modem. The retail price for the Model 2 with 2MB of RAM is \$2,799, while the Model 1 with 1MB of RAM sells for \$1,999.

For more information, contact your local Zenith Data Systems authorized dealer.

-CC

marketing challenge. Zenith seems to have done well. A recent marketing success story was in the education field, an area in which Zenith has not been well known. But that began to change when the Harvard University School of Business recently recommended to its MBA students that they purchase the Zenith SupersPort 286. It was the first time the institution had not given the endorsement to an IBM machine.

Other universities soon followed suit: Northwestern, Indiana Wesleyan, Rollins and the University of Chicago. Zenith is now one of the top three computer manufacturers in the education market, with its computers in use at more than 1,000 colleges and universities.

Zenith laptops also are being used in elementary and high schools, where Apples are traditionally dominant. Concerned that the students of New Jersey's Phillipsburg Christian Academy learn to use computers even though the elementary school doesn't have the space or budget for a computer lab, the school's principal decided to use Zenith laptops in the classroom. A student takes the computer and a printer to his or her desk and uses it without disturbing others. At the end of the day, the equipment can easily be stored and locked in a closet.

Schools really overlook the practical and budgetary benefits of using laptops," says the Rev. Douglas K. Batchelder, the school's principal. He particularly commends Zenith's educational purchase program.

He also praises the Zenith Forum (GO ZENITH), where Batchelder and other laptop users can turn for expert problem-

Although the forum is not officially supported by Zenith Data Systems, several company employees volunteer their time online answering members' questions and offering technical and customer assistance electronically.

Forum administrator Joseph Katz, a professor of English at the University of South Carolina, says the forum's purpose is to provide a large, international community of Zenith computer users and offer them expert product support. This is where the forum excels. Members can expect knowledgeable. reliable and timely responses to their questions.

"What we do, and we do it every day, is to talk people through solutions to problems," says Katz, adding that one of the best sources of answers is through weekly conferences in the forum. A conference focusing exclusively on laptop computers takes place every Tuesday at 9:30 p.m. ET. Message Section 2, "Laptops," also is devoted to laptop concerns. Utilities, applications and technical help files for the Zenith laptops are found in almost all of the libraries.

One advantage of not being formally affiliated with the company is that the forum can offer honest appraisals of Zenith products.

The forum also is used by software vendors who distribute various shareware products online, including PKWare, Fifth Generation Systems and SoftKlone. In addition, Zenith Data Systems offers updates of its MS-DOS operating system online.

Although laptop sales have given Zenith its greatest visibility, as the company has snapped up more than 28 percent of the commercial market (according to the market research firm Dataquest), company officials say the mainstay of the business is in the high-end 60386 desktop and server market where the largest volume of the firm's commercial sales are made. Still, laptops have an appeal. How can that much power be stored in something so small and lightweight?

"I have always believed that part of the future of microcomputing is in laptops," says Katz. "The Zenith laptops are extraordinary machines that are reliable and durable. We users depend on these computers absolutely."

Cathryn Conroy is a contributing editor of CompuServe Magazine. Her CompuServe User ID number is 70007,417.

A Host of Applications

All it takes for you to remotely link your Zenith laptop on the road with your desktop office computer is a modem and communications program for the laptop and for the desktop another modem and one of these free programs in the Zenith Forum's Library 6, "Applications."

Minimal Host System: A minimal host system that uses little disk space and allows unattended file transfers but not messages. P2HOST.ZIP

MiniHost: MiniHost allows file transfers and messages, supports multiple callers and uses less disk space than MaxiHost. MHOST.ZIP

MaxiHost: MaxiHost is a complete private or business bulletin board system that supports the full range of functions in MiniHost as well as other features suitable for more complex situations. MHO490.ZIP

'Handy' Takes On a Whole New Meaning

Don't let its size fool you; Atari's diminutive palmtop is a big deal.

What weighs in at just under one pound; is smaller than a videocassette; and, com-

pared to personal productivity tools such as the Sharp Wizard or Casio B.O.S.S., is powerful and flexible enough to

become the personal computer of choice for many? It's the \$399 Portfolio, the forerunner of a new breed of palmtop-sized computers, from US Atari.

Measuring 1 by 7.87 by 3.87 inches, the Port, as it's affectionately called by members of the Atari Portfolio Forum, is being welcomed especially by business travelers and

executives. Says John Knight, a regional sales manager for a major entertainment firm and an administrator in the forum, "I used to always drag along a laptop whenever

I traveled. Now I stick the Port in my briefcase or coat pocket and whip it out anytime I need to take notes or

compose a letter. It's perfect for working on a crowded flight or on a small hotel nightstand." Knight bought one of the first units to reach the market.

While portability might be an initial selling point, Knight, along with most others, would soon have abandoned the machine if it weren't functional. The system's 256K ROMbased applications include a text editor, 127-column by 255-row spreadsheet capable of reading and writing Lotus WKS formats, calculator, address book and appointment diary—each instantly accessible from a dedicated hot key.

Although the unit works adequately as a stand-alone, most serious users quickly add on a FRAM card drive plus optional external serial and parallel modules, enabling online communications or file transfers with a desktop or mainframe. A *PC Magazine* reviewer labeled the Port "a serious computer that fits in your pocket, but won't remove all the cash from that pocket to make room for it."

Another delighted owner is San Francisco Bay area business consultant Howard Sambol who uses his Portfolio with the text editor QEDEXE.ARC (Library 5, "Editors/Word Processors"). "As I sip Cappuccino at the local cafe, I'm able to get real work done—writing reports, letters, agreements and educational pieces. Once the documents are completed, I transfer them to my Mac II, make minor formatting adjustments, and then laser print the final version. In this way, my productivity is significantly increased. Moreover because the Port is fun to use, it acts as a motivator for me to accomplish more while away from my office," Sambol says.

The Portfolio is powered by a 4.9 MHz



Portfolio 'palmtop' enables him to work well anywhere: Sambol

Portfolio Software

The Atari Portfolio Forum (GO APORT-FOLIO) provides a wide variety of quality software to run on this palmtop-sized computer. While the unit's BIT-DOS is an MS-DOS 2.11 look-alike, machine limitations require that most software be specifically written or modified to properly run on the Port. Here's a listing of what is available and where you'll find it:

Complete Communications Program: This is a full-fledged communication program for the Portfolio including file transfer via XMODEM or capture buffer and macro capabilities (XTERM2.COM in Library 2, "Communications," 3K).

MCI Mail Manager: This file was especially rewritten for the Portfolio. If you use MCI Mail, this could be the most important program you could ever own (EMMAPF.ARC in Library 2, "Communications," 26K).

Password Protection: For the security-minded Portfolio owner (PASSWO.ZIP in Library 3, "Utilities," 2K).

Bug Buster: Fixes bugs in the Portfolio for version 1.052 or earlier (UPDATE.ARC

in Library 3, "Utilities," 2K).

Strip Returns: This program strips hard carriage returns from ASCII files. Important for the user who prepares text on the Portfolio, but finishes up on a regular word processor or a standard IBM PC, Macintosh or other machine (STRIP.ARC in Library 3, "Utilities," 12K).

Othello: The game Othello rewritten for the Portfolio. A relaxing diversion for the harried business traveler or executive (OTHELL.COM and OTHELL.DOC in Library 4, "Entertainment," 10K and 5K).

Music System: A tiny music system for the Portfolio. Included is a small compatible ANSI.SYS. (YANKEE.ARC in Library 4, "Entertainment," 5K).

Text Editor: A popular and excellent shareware text editor. The package contains Q.EXE (the actual program), ORDER-FRM.DOC, and QHELP.TXT, and un-Arcs to 57K. See QEDAUX.ARC for the configuration program and README, and get QEDDOC.ARC or QEDOC?.ARC for documentation. (QEDEXE.ARC in Library 5, "Editors/Word Processors," 41K).

Travel Expenses: Worksheet template for recording travel expenses. Since the Portfolio worksheet is compatible with Lotus 1-2-3 and other spreadsheets, it is ideal for the traveling businessperson (TRAVEL.WKS in Library 7, "Applications," 1K).

BASIC Program: Tiny BASIC that is compatible with the Portfolio. Source code, documentation, and sample BASIC program included (TBASIC.ARC in Library 8, "Programming," 38K).

How-to Tips: Five handy tips for using the Portfolio, including how to convert the address book into a database manager 80C88 microprocessor and three AA batteries offering 128K (expandable to 640K) (PRTFTI.TXT in Library 17, "Miscellaneous Files," 2K).

Touch-typing Tips Handy tips for touchtyping on the Portfolio. Some people adjust immediately while others require a helpful hint or two. (TOUCH1.TXT in Library 17, "Miscellaneous Files," 4K).

-MP

of static RAM memory incorporating a DOS 2.11 look-alike operating system. This allows the computer to run most MS-DOS software, within its memory limitations, that doesn't directly address the screen.

Ron Luks, overall manager of the Atari family of forums, says, "We offer in our libraries the largest selection of Port software anywhere with programs added on a continual basis. I'm excited by the potential of this new technology, and the forum's role in it," he says. "Sales are already in the hundreds of thousands, and we're really the only source of support beyond the manufacturer once you bring it home and pull it out of the box."

The latest file uploads are first placed into Library 1, "New Uploads," where they remain for three to four weeks prior to being moved to their permanent homes. (See the accompanying box for some of Atari Portfolio Forum's most popular files.)

One program, XTERM2.COM, found in the forum's Library 2, "Communications," merits special mention. Written by forum member Jim Strauss to facilitate the transfer of files for non-MS-DOS users to their principal computers, XTERM has evolved into the preferred port terminal program for most. Featuring half- and full-duplex along with simple macro capabilities, XTERM handles XMODEM uploads and downloads as well as ASCII text captures. "Many also use a companion program, DIAL.ARC, to have their Hayes-compatible modem automati-

cally dial up their local CompuServe node," says Luks.

Assisting in Portfolio program development is a major goal of the new forum. Two sections have been established for this purpose. Section 8, "Programming," is open to all, while Section 9, "Registered Portfolio Developers," is restricted to registered programmers purchasing a developers kit from Atari Corp. "Atari has promised us that they'll be using this area to distribute enhancements and updates to the kit," says Luks. "These two areas should bring about the sharing of a lot of great ideas and result in the creation of much useful software."

One question that inevitably pops up in an extended discussion regarding a minisized computer is its keyboard. The Port sports a 63-key QWERTY-style layout with numeric pad and 10 function keys. "The keys have a positive feel and emit an audible click when depressed," says Knight. "Naturally, the keys are closer together than on a standard typewriter; yet, within an hour after I started working with it, I was completely comfortable."

Industry scuttlebutt at press time, echoed by newsletters such as *CPU Confidential*, indicate that Atari has plans to release a 80286-based version of the Portfolio even more powerful than the original.

Mike Pietruk is a forum administrator of CompuServe's Investors' Forum and an assistant vice president of Preferred Savings & Loan in Chicago. His CompuServe User ID number is 76703.4346.





Budgeting 'blue-sky' businesses: Campbell

All that Budget Jazz

Would-be entrepreneurs and small business owners need to chart a financial course first and foremost.

"If you don't know your destination and don't know how to get there, how will you know when you've arrived?"

Virginia Campbell gets paid to ask common sense financial questions of aspiring entrepreneurs, before they mortgage their houses to build a better mousetrap. As director of the Small Business Development Center in St. Louis, Mo., she steers many a not-quite-ready-for-prime-time CEO back to the spreadsheet for another go-around with the bottom line.

"If you're starting a new business, budgeting becomes a best-educated guess," Campbell explains. "I'd emphasize the educated, because without doing the research, you're not going to be able to come up with meaningful numbers. Don't try to go into business without a business plan, and I say that first, foremost, in capital letters. Where do you want this business to go? How much will it cost to get there?"

The best way to tackle your business budget is right at your fingertips. IQuest's 900-plus databases (GO IQuest) can give you information on sales potential and cost projections between breakfast and lunch—and for less than the cost of a night on the town.

Budgetary fact-finding involves two separate steps. "You try to determine what your sales will be, then you project the cost of making those sales," according to CPA Phillis Rockhold, owner of a St. Louis accounting firm that specializes in helping clients make the most of their computer capabilities.

But there are some businesses for which information just isn't available. In those cases, Rockhold recommends researching the industry norms. "Say you're in construction," she says. "You might be able to pull out data on sales, selling expenses, rental costs, depreciation and other things to see if you're in line with what is standard for your type of firm. Industry and trade association publications often publish member surveys that give a lot of helpful data."

Irv Feldman of Flushing, N.Y., uses IQuest to key into marketing data for the clients of Feldman and Feldman Consulting, specialists in accounting services and computer systems. In particular, he relies on online demographic data to help build a picture of the sales potential of a particular product or service. "We come up with a profile," he explains, "things that would indicate a need in the marketplace. We look at where the product might be sold and who might buy it.

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Look Before You Make the Entrepreneurial Leap

Necessity Isn't the Only Mother of Invention, page 29

Putting a Plan Together

"Recently I wanted to look at some SEC (Securities and Exchange Commission) filings. I could have gone to the local SEC office, stood in line and copied it, but I was able to get the highlights online much more quickly."

Consultant Wayne Lundberg has been accessing IQuest from his Chula Vista, Calif., office since 1985.

He focuses on market penetration and development; the cost of manufacturing, raw materials, shipping and duties. "When I help a client with budgeting, I'm really asking, What resources will you commit? What will be the cost of achieving your market objectives in terms of people, facilities, computers, equipment and capital?" Lundberg recently spent \$116 researching patents related to diatomaceous earth. He found two companies working on it, an indication that there will be a better source of supply down the

Once you've employed IQuest or other CompuServe products to gather market research information, two forums can help you use that raw data to organize or update an effective business plan. The Working From Home libraries (GO WORK) present guides to writing a plan (BUSPLA.ZIP, Library 2, "Business Info;" PLAN.BIZ, Library 5, "Mail Businesses"), and its message board offers the business-planning expertise of Sysops Paul and Sarah Edwards, authors of the best-selling book Working From Home. The International Entrepeneurs' Network Forum (GO USEN) maintains a message

section devoted specifically to the discussion, development and implementation of business plans, and its corresponding library holds numerous sample plans and outlines, including a two-part file from Price Waterhouse (see PWBUSLDOC, Library 8, "Business Plan"). Browsing other USEN libraries will yield further resources and information. The forum's newsletter (USEN35.LET, Library 1) lists some questions every business plan should address, and Stratplan, a strategic planning program that helps you do an industry analysis, is available in the Business Software Library (STRAT1.ARC, Library 10).

road. "How else could you do that type of research that quickly without a large research staff?" he asks.

Lundberg believes that a far-reaching database search is crucial, because today's marketplace is really the entire world. "Anybody in business today has got to have a wider perspective, because somebody else may come in and eat your lunch—and that person could just as likely be in Uganda or New Zealand as across the street."

IQuest offers databases covering business

worldwide. "The European Community is the real hot topic now," IQuest Senior Information Systems Analyst Lisa Verzilli says. "We're increasing our international coverage as 1992 approaches."

Campbell urges all small-business owners to take the time to formalize their bud-

gets and business plans. "This way you can do the bulk of the ground work without spending lots of hard cash. I've seen people pull their retirement funds out, mortgage the house and cash in their CDs to pursue what they thought was a good idea for a business," she says.

"The old cliche that failing to plan is planning to fail is true."

Maura J. Mackowski is a free-lance science and business writer based in St. Louis. Her CompuServe User ID number is 76004,2243.

Start Your Search Smart

IQuest Senior Information Systems Analyst Lisa Verzilli notes that the system can ease you into your budget research by helping you pinpoint databases. "Through a series of menus, IQuest-I conducts an online reference interview that helps to narrow in on an appropriate database," she says. If you already have a specific database in mind, use IQuest-II. With Smart-SCAN, you can review several databases with a single search to help identify which may be most appropriate.

"One hurdle you have to make when you want to get information on companies in any industry is whether they are private or publicly held," Verzilli says. Publicly held firms are required by federal law to file financial information with the SEC, while privately held firms are not.

PTS PROMT, a multi-industry database that provides data on capital expenditures, R&D expenses, management practices, new products and technology in all kinds of industries, is a good source for company information. Trinet

US Businesses covers 7.5 million public and private companies by location, including estimated sales and market share.

In gathering information for the cost side of the ledger, PTS Forecast and PTS US Time Series give a historical look and a forecast of prices and sales of specific products.

Verzilli offers a few tips to make searches in the IQuest databases easier:

- Clearly identify your questions, come up with a list of terms or keywords to search by before you get online.
- ► Wherever possible, search by ticker symbols or SIC codes.

IQuest's array of databases can boggle even the best-organized brain, Verzilli admits. "Don't hesitate to type 'SOS' anytime," she says, "and you'll be connected online with an information specialist who can help you use the service as well as answer database-specific questions."

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GO OLI for more information.



A Cup of Pekoe, Market Data and Thou

The electric tea bag dunker: a brilliant idea whose time has come. Or so believes Jane "Eureka" Jones, CEO of Chef's Surprise Inc. Her current products, the Fin-o-matic and Sonic Spudster, sold exclusively in the United Kingdom, have made fish 'n' chips a snap for 10 million Britons. Now she hopes to boost the income side of her fiscal '91 budget by developing a new product she can target to the High Tea market.

Jones didn't win the 1989 Mothers of Invention Award for nothing, though. Before she takes a single R&D pound from the Pneumatic Prune Pitter or spends tuppence on advertising, she turns to IQuest for the lowdown on marketing and costing the Dandy Dunker, her new tea-bag venture.

First, Jones takes the pulse of the tea drinking populace in Britain. She uses IQuest's Marketing & Advertising Smart-SCAN to look for information on TEA/AND CONSUM/AND MARKET SHARE AND BRITAIN. An abstract in PTS PROMT covering Britain's top beverage choices from the August 1987 issue of Beverage Industry shows that tea, with a 44 percent share, has more than double the market share of coffee. Jones reviews the political situation in the Far East before she's satisfied that there will always be a teatime in Britain.

She turns her keyboard to production cost evaluation. Using the Manufacturing Smart-SCAN, she turns up several sources in the metals industry that discuss historical and anticipated prices of stainless steel, the main cost factor for the Dandy Dunker. Calling up IQuest's Tradename SmartSCAN, Jones is relieved to notice that no one else has copped

the Dandy Dunker name.

Jones' research engineers are stumped by a tendency for the tea leaves to float to the top of the cup. Jones looks at two additional services on CompuServe: Thomas Register Online® and D&B Dun's Market Identifiers® (GO DUNS). She unearths a company that makes tea balls and coffee percolator baskets. An acquisition candidate? Could be, Jones reflects, particularly if they can re-tool to handle crumpet rings.

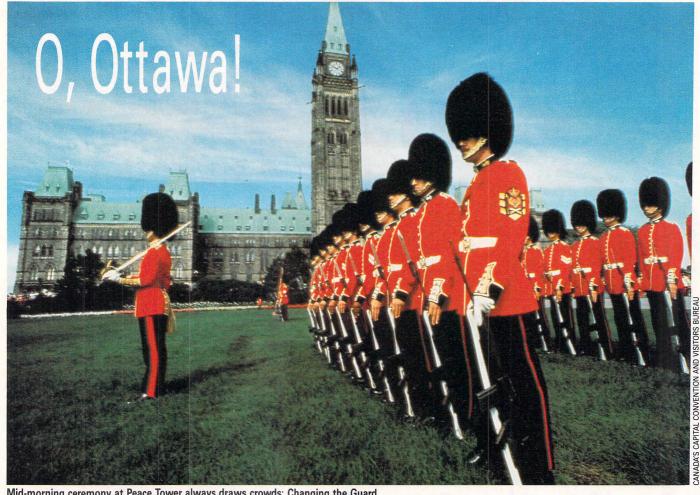
Jones prints out the marketing and cost data she's captured and heads off to her first budget planning session with the new Dandy Dunker design team.

-MM

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Mid-morning ceremony at Peace Tower always draws crowds: Changing the Guard

Canada's capital city is a tale of two cultures: British architecture, French food and yes-Mounties.

Capital cities are display windows on

their countries, showcasing the nation's values and self-image. As the 30-square-mile capital of the second largest nation on earth, little Ottawa provides a primer on Canadian sensibilities and concerns. At the same time, the capital district (which incorporates the adjacent city of Hull, Quebec) maintains its own identity and hybrid culture as an urban center on the frontier between English-speaking and French-speaking Canada.

Situated where the Ottawa River. waterway to the northern wilderness, meets the Rideau River, Ottawa spent its early years as a fur and timber town. That riverside location and its relative isolation from the United States—a staunch enemy in the 19th century—made the town a natural terminal point for the Rideau Canal, built as a military supply route between Lake Ontario and Montreal in the early 1800s. In

1857, Britain selected Ottawa as the capital

of the United Provinces of Canada-again because it was reassuringly remote from the hostile United States.

Relations along the world's longest undefended border have warmed in the last century and a quarter, and Americans are more than welcome in Ottawa these days. Many Canadians, in fact, are pleased when Americans show an interest in Canada's heritage—something they've fought hard to preserve from the inroads of American pop cul-

The advantages of a planned city are obvious in Ottawa's relation to its natural setting. The city is dotted with parklands and surrounded by natural preserves known as the Green Belt. The Rideau Canal, which bisects the city, provides the world's longest skating rink in the winter and an extensive run for pleasure boaters in the summer. The canalside walkways and parks accommodate strollers, picnickers, even bureaucrats with briefcases out for some cool air.

The top location in the city is the promontory overlooking the Ottawa River, known as Parliament Hill. The Gothic Revival government buildings that dominate the hill resemble a British university or churchreminders that Canadian government retains its British roots. It makes sense to

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Tales of Transportation, page 34

Bargain Flights Do Exist, page 35



Commemorative fireworks: Canada Day

begin an Ottawa visit with the city's raison d'être, then sample the museums and galleries. But save time to enjoy the amenities of the capital district—the shops, restaurants and nightlife.

Free tours of Parliament Hill (daily, every 15 minutes to half hour) begin directly below the 294-foot Peace Tower. Tours start at 9 a.m., and early birds can see the chambers of the Senate and House of Commons before the day's work begins. Two tour stops are especially notable: the elaborately carved Library of Parliament and the ascent to the top of the Peace Tower for the best panoramic city view.

The tower rules over both grand and intimate official observances. A central chamber houses the Books of the War Dead—honor roles of Canadian soldiers. At 10 a.m. each day, the pages of the books are turned in a modest but moving ceremony. At 12:30 each weekday, the 53 bronze bells (weighing from 10 pounds to 11 tons) of the Peace Tower Carillion play a 15-minute concert. The tower is also the centerpiece in the capital's Canada Day festivities on July 1, when it is lit by rockets' red glare and bombs bursting in air—the national birthday fireworks. At 10 a.m. from June into September, the lawn in front of the tower offers the best bit of





European Gallery displays Canada's art legacy: National Gallery of Canada

showmanship this side of Buckingham Palace at the Changing the Guard ceremony.

The only spectacle to rival it is the Royal Canadian Mounted Police Musical Ride—a military pageant on horseback performed for audiences worldwide. When the Ride is home at the RCMP College on the outskirts of Ottawa, you can drop by the stables to watch them practice.

One other bit of official glitter not to miss is the Royal Canadian Mint, a block from the Parliament buildings. Tours are by appointment only; call 613/992-2348. All circulating coinage comes from Winnipeg these days, but the Ottawa branch strikes the famous Maple Leaf investment coins in platinum,

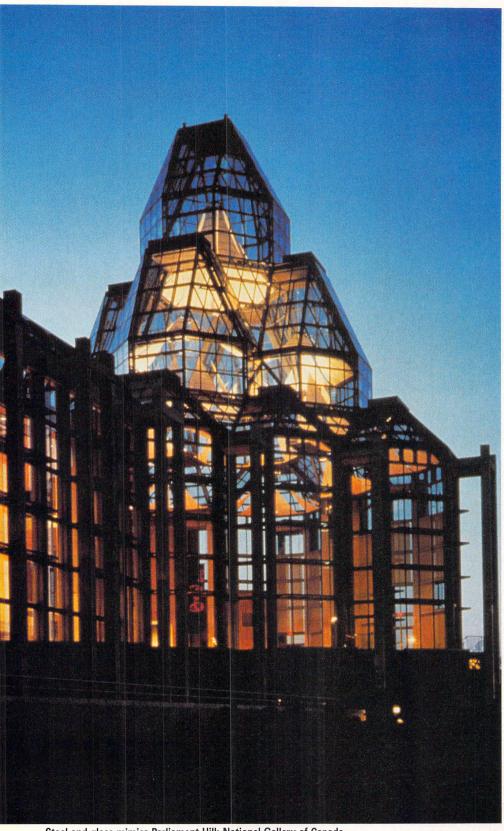
gold and silver, as well as special commemoratives.

Canada's cultural treasures lurk behind the doors of Ottawa's 30-plus museums. Canada has opened three major new museums in 1988-89: the National Aviation Museum, the National Gallery of Canada and the Canadian Museum of Civilization.

The aviation museum sprawls at the edge of the old Rockcliffe Airport northeast of the city center. It's an expensive cab ride or a three-change public bus trip from downtown, so many visitors skip it. Too bad. It's one of the best collections of vintage aircraft in the world.

The Museum of Civilization, on the Hull

AUGUST 1990



Steel and glass mimics Parliament Hill: National Gallery of Canada

side of the Ottawa River, opened in 1989, although the interior is not entirely completed. The CINEPLUS is the only combination IMAX and OMNIMAX theater anywhere. It's so popular that you should buy tickets when you enter the museum and tour the exhibits until your show time. The three-story-high Grand Hall showcases Canada's original inhabitants—the Indians and Inuit—and also frames the modern city through a glass wall. Be sure to walk the maze of History Hall, which takes you through realistic simulations of settlements from 1,000 years of Canadian history.

The capital's architectural masterpiece is the National Gallery of Canada—a glass and steel structure that echoes the lines of Parliament Hill in an up-to-date style. The European and contemporary art collections are good, but if your time is limited, concentrate on the Canadian work. Two highlights include the reconstruction of the baroque Rideau Convent Chapel and the galleries devoted to the Group of Seven—early 20th century painters who defined a distinctly Canadian modern art.

Notable among other museums are the Museum of Natural Sciences and the Agriculture Museum, part of the Experimental Farm in the city's heart. The Centre for Caricature at 136 St. Patrick Street will give you a good laugh as well as insight into Canadian political humor.

Ottawa has an undeserved reputation as a city that closes when the sun sets. That may have been true at one time, but nightlife abounds in Ottawa and across the river in Hull, Quebec.

The National Arts Centre (613/563-1144) near Parliament Hill on Elgin Street is the region's chief year-round venue for the performing arts. The NAC has a resident orchestra and presents touring plays, dance and variety shows. The NAC complex also includes a canalside cafe that locals frequent but visitors often overlook. For homegrown drama, the Great Canadian Theatre Company (613/236-5196) on Gladstone Avenue is dedicated to work by Canadian playwrights. The GCTC is a few miles from the city center, but it's surrounded by Ottawa's Little Italy, simplifying before-theater dinner plans or after-dinner espresso arrangements.

The theater of the streets may suffice for you. Byward Market—the old town area laid out by Lt. Colonel John By when he built the Rideau Canal—was for many years an outdoor produce and meat market district. You can still shop for the table during the day, but like many other North American market districts, it has acquired rows of boutiques, gift shops, cafés, art galleries, gourmet food stores and trendy eateries—making it a con-

Travel Tips

Before you settle travel plans, see the World Travel Guide in the Official Airline Guide (GO OAG), which lumps Toronto and Ottawa together under Ontario in its state/ region areas. Be sure to check the calendar of events in OTR Events Online for promotions and festivities. For the last year or so. a US dollar was worth about \$1.20 in Canadian currency. See Option 8 on the OAG main menu.

Canada's Capital Visitor and Convention Bureau is unusually helpful to travelers. Write them at 7th Floor, 222 Queen St., Ottawa K1P 5V9 for information or call 613/239-5000. The Bureau tracks available rooms in the capital district, making it a kind of centralized booking service.

Many of the hotels are grand, but the bed-and-breakfast operations may be even better. Some B&Bs are run by local politicians and other colorful characters. One of the most elegant yet affordable is the Cartier House Inn (613/236-4667) two blocks from the Elgin Street nightclub and restaurant district.

Pick up What's On/Voici Ottawa-Hull at your hotel or a tourism information center. This free weekly bilingual publication promotes its advertisers, but also offers excellent updates on activities in the city and useful, pocket-sized maps.

Public transit can be a good way to get around. From late spring to early fall, the single-fee Visibus makes a tour of most major central city sights. The pass is also good all day on most routes of OC Transpo, the regional bus service. OC Transpo offers an unusual service to visitors: Call 613/741-4390, explain where you are and where you want to go, and an operator will tell you where to get a bus, where to change and where to get off-in French or English. Taxis can be more expedient, but are no particular bargain.

Driving is not difficult, but is slightly different from the United States. Road signs and speed limits are in kilometers rather than miles, and seatbelts are mandatory. Gasoline is sold by the liter and tends to be more expensive than in the United States. Ontario permits a right turn on a red light after you come to a complete stop; Quebec does not. Some visitors claim this violation is a favorite source of municipal revenue in Hull.

Ontario refunds sales taxes to visitors. Retail sales tax is 8 percent, but you can claim a refund if you leave the province of Ontario within 30 days. Ask for forms from any major retail outlet, an information center or from the Ontario Sales Tax Office at 1355 Bank St. Quebec's retail sales tax of 9 percent stays in Quebec's coffers.

-PH,DL

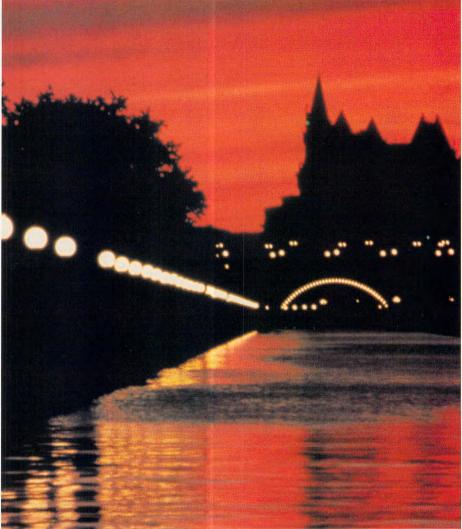
sumer circus from early morning until the bars close at 1 a.m. Savor some of the best Viennese pastry this side of the Atlantic at the Café Vienna (613/594-8758) on George

In addition to the Byward Market boutiques, be sure to visit the Rideau Centre, attached to the Westin Hotel, for three floors of swank shops. Contemporary crafts are found along the Sparks Street Mall, a pedestrian district near Parliament Hill.

Britain won the political battle for Canada's soil, but the French triumphed on the culinary front. If you're spending the day shopping the Byward Market, try the Europa Dining Lounge (613/238-3636) on Cooper Street for a broad selection of Continental offerings. Two of the better distinctly French restaurants are the Café Henry Burger (819/ 777-5646) on Rue Laurier in Hull and Le Metro (613/280-8123) on Elgin in Ottawa. A little off the beaten path, the Vendôme (613/ 232-5992) is a small gem in a former residence on Metcalfe Street, a few blocks from the financial district. For French cuisine with an elegant Serbian accent, check out Restaurant Cica Branko (613/234-0064) on Queen Street.

Nightclubs and pubs with entertainment are concentrated in three areas of the District: along Elgin Street south of Lisgar, in the Byward Market area, and across the bridge in Hull. For a bicultural immersion in capital nightlife, open the evening at a disco on Elgin, then proceed to a pub in the Byward Market. When English-speaking Ottawa calls it a night at 1 a.m., hire a taxior stroll—across the Alexandra Bridge to Hull, where French Canadian revelry continues till a night-owl's curfew of 3 a.m.

Patricia Harris and David Lyon are free-lance writers based Sunset spectacular: On the Rideau Canal in Cambridge, Mass.



Getting Around: Boats, Bikes and Skis

Ottawa is an urban island in a nation wedded to wilderness. There's water, water everywhere around Ottawa and several ways to enjoy it. Paul's Boat Lines Ltd. (613/733-5186) offers excursions on the Rideau Canal or the Ottawa River several times daily. If you prefer self-propulsion, you can rent canoes or paddleboats at Dows Lake. A 90-minute drive west to Foresters Falls brings you to the headquarters of OWL Rafting, which runs single and multiday excursions on the world-class whitewater of the Ottawa River.

Cycling in Ottawa is simplified by 94 miles of dedicated bike paths. Several places rent bicycles, but the most complete is RentABike at Chateau Laurier, a castle-like hotel adjacent to Parliament Hill. Rates range from \$3 per hour or \$10 per day for a simple one-speed to \$6 per hour/\$18 per day for an 18-speed mountain bike. Tandem bikes, helmets, locks and baby seats also are available.

A favored destination for cyclists and hikers alike is Gatineau Park, 138 square miles on the Quebec side of the Ottawa River. The park is the capital district's wilderness playground. The tamer portions offer camping, swimming, boating, fishing and picnicking. A trail network of 115 miles serves hikers through much of the year and snowshoers and cross-country skiers the rest. The park also has excellent downhill skiing. Ottawa office workers brag about leaving work at 5 p.m. and starting their first downhill runs—even after stopping to rent equipment—at 6.

The back trails of Gatineau Park are good for observing wildlife—

but you'll find the best birding at Leamy Lake Ecological Park, a few miles northeast of Hull. The park is situated where the Gatineau River flows into the Ottawa. The lake area is good for swimming and windsurfing, but the marshes surrounding the confluence of the rivers are especially rich with birdlife.

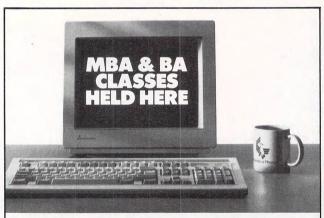
But you don't need to leave the central city to enjoy the great Canadian outdoors. The five miles of Rideau Canal pathways are planned landscapes with occasional stops for illustrated panels that describe the evolution of the National Capital. Start the scenic walkway at the corner of Rideau Street and Colonel By Drive and follow it all the way out to Carleton University. At its terminus, you can walk up the hill to the college and catch a bus back downtown.

-PH,DL





Canal pathways part of national capital history: Seasonal views



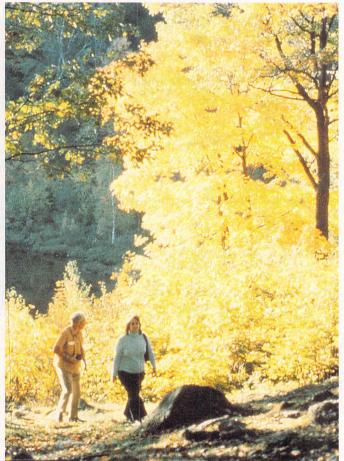
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Back trails for nature watchers: Gatineau Park

Lower Fares on a Higher Plane

Airline services offer low-fare savings for any itinerary.

Your CompuServe connections can help you save money on air travel. Travelshopper and Eaasy Sabre both offer features that let you define specific travel itineraries and search for the lowest possible fares, then actually make the reservations online.

Travelshopper's "Low Fare Finder"

- 1. Visit the feature by typing GO PARS and select Option 6, "Access Travelshopper." (If you haven't already, sign up by using the "Enrollment" option. You are asked for your name, address, phone number and a credit card number for credit verification.
- 2. From the Travelshopper main menu, select Option 1, "Available Flights/Book Flights." Create your travel itinerary, answering prompts for departure and destination cities, date and preferred time, if any, and the number of people traveling in your party.
- 3. From the flight availability display, select a flight for which you want booking details and price information. The system then lists fare classes for that flight. Choose Y class (coach).
- 4. The next menu lets you look at available flights to the next city, return flights, changes, reservations, open flights, and so on. Type D (for "done") when the itinerary is complete. (If it is a multileg trip, choose available flights to the next city; if it is a round-trip, choose return flights and booking code "Y"; if it is a one-way trip, choose itinerary complete.)
- 5. When D is entered, the reservation is displayed, including your name, fare type, day and evening phone and ticketing method. You are asked to complete and verify the information.
- 6. The Low Fare Finder screen appears, displaying two fares. At the top is the fare at Y class (usually full-fare coach); the bottom is the lowest fare available on the chosen flight. You can choose either to book the flight (actually make the reservation), make a change or select "Fare Request Only" to cancel and look at other flights or leave the feature.

For more information, see the Travelshopper main menu by typing GO PARS.

Eaasy Sabre's "BargainFinder"

1. Type GO SABRE and select Option 5, "Access Easy Sabre." If you haven't already signed up for the "AAdvantage" program, you can read about it and apply to join with options on the main menu. An AAdvantage number and password are required to use BargainFinder.

2. After entering your AAdvantage num-

ber, you will be at the Reservation menu. Select the first option, "Flight Schedules and Availability," to record your travel plans. You are prompted for your departure and destination cities, and date and preferred time, if any. You then are asked whether you want to see all available flights or limit the display to a specific class of service, airline or connecting city.

- 3. After that, available flights are displayed with options to book in specific classes or to see more flights meeting your specifications. Select the flight you want more information about and you are prompted for the number of people traveling in your party.
- 4. Next, the system displays the class of service preference with an additional option to "use BargainFinder to locate the lowest discounted fare available." Select that option and the system prompts for your AAdvantage number and password (if not already entered at sign-on), as issued when you ap-

plied for the AAdvantage service.

5. The system then allows you either to use personal profile data already on file or to enter new specifics, including name of each passenger and phone numbers.

6. Once you have verified the profile data and the flight under consideration, the system lets you select several other preferences, such as smoking/non-smoking sections, special dietary meals needed and frequent flyer

number.

7. Now selecting the "Price Itinerary" option puts the BargainFinder feature to work. It locates the lowest possible fares for your specifications and prompts you to either book the flight or cancel and exit.

For more information on Eaasy Sabre, including the AAdvantage service, type GO SABRE. ◀

Charles Bowen is a contributing editor of CompuServe Magazine. His CompuServe User ID number is 70007,411.

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Lunacy: The Home Game



Effervescent emcee: Bob Illuminati

Survey Says: You Guessed It! is now surcharge-free, chock full of merchandise, and as weird as ever.

Have you ever sat back in that battered armchair you refuse to get rid of and wondered what it would be like to compete on a real game show? How it might feel to face off with the five-month champion, blow him out

of the water on an obscure tie-breaker topic, such as Lower Slobovian Folk Dancing, and hear the host, a Wink Martindale clone, deliver those fateful words toward the upper reaches of the studio: "Johnny, what fabulous prizes has she won?"

Then, hop a plane to Hollywood and get in line for *Card Sharks* (and smile and jump around a lot), because *You Guessed It!* (GO YGI), CompuServe's interactive trivia challenge, can't help you there. It is, as they say, Something Completely Different.

OK, maybe not that different. YGI! does have an unctuous, tactless, plaid-clad emcee, Bob Illuminati, with a road-kill toupee and an endless supply of teeth. There's a "set" of sorts, with the "Big Board," a large digitized display that flashes the answers, as the

focal point. And yes, yes, yes, there is plenty of fantastic new merchandise to be won.

But what gives the contest its flavor (some would allege its aftertaste) is the ensemble cast of characters who run the show. Although veterans say that, for them, this strange brew of electronic mannequins has faded into the game's background, newcomers often find them realistic enough to fruitlessly attempt a dialogue.

Resounding within the hallowed walls of *YGI!* Studio 3-C are the "mellifluous modulations" of Phil Vox, announcer and second banana to host Bob, whom he affectionately introduces before each match as "the guy

who makes your neurons work overtime." Also in regular supporting roles are Mary Lou Beltzer, the lobotomy candidate holding Bob's much-needed cue cards; Heidi Overhart, the burly, bench-pressing camerawoman; and Stan the Stagehand, described by YGI! regular "Vister" as "a child of Woodstock."

"Stan wears a Grateful Dead T-shirt and ripped jeans all the time," Vister says. "He's generous to a fault, and always glad to see old hippies. He doesn't have any real stage duties, but then he doesn't have any skills either, so it works out fine."

Playing YGI!, you'll not only get a right-brain workout, mentally fleshing out the fictional crew and audience members, you'll also find yourself immersed in a gaming $d\acute{e}j\grave{a}$ vu. It's as if someone had thrown a handful of TV trivia game shows into a blender and punched the purée button. Answers are decided and points awarded by audience surveys.

But instead of inane queries in the vein of "Name something you'd find in a peanut butter and jelly sandwich," YGI! questions are based on classical and popular culture. Participants must have a working knowledge of the arts, science, sports, geography, famous personalities, vocabulary and a gaggle of other randomly selected subjects. The object of the game is to guess the most favored audience answer.

"Ace," another longtime YGI! player who has seen many of the thousands of questions more than once, finds the mental aspect appealing. "You compete solely on an intellectual basis. There's no macho shoot-'em-up orientation, so your success depends less on your personality type than whether you've got the smarts to answer the questions."

Any number of considerations might be involved in stepping into the *YGI!* studio lobby in search of an opponent (see box). Certainly there are the bonus points; earned by winning or merely completing a game

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> Trivia That Bites Back

A Watchful Eye On the Sky, p. 39 with your gray matter intact, they entitle the bearer to cull CompuServe-related and other point-valued prizes from the Bonus Bunker. Sorry, no Mercedes convertibles here, but 50 new kinds of booty, from sports equipment to telephones, have been added recently.

Also shining from on high is the Monarch title, a sort of king-of-the-mountain claim to YGI! mastery, which requires only that you defeat the current champion in one game. Hence the honor changes hands a lot. Says Vister, "Anyone can win it any time, with the luck of the questions drawn." Ten consecutive Monarch wins earns the YGI! gamer the exalted and only once-achieved (Ace) position of Grand Master. No Mercedes won here, either, just a two-week retirement.

Most YGIers, however, are into the game strictly for the laughs, matching wits instead of battling brains. From start to finish, contestants must endure Bob Illuminati's sticksto-your-ribs word play and anecdotes told after questions, and sarcastic quips following delayed responses and "glitches," the YGI! euphemism for wrong answers. For instance, Bob might preface a question about breads with the hearty exclamation, "Hey, you knead to get this one right!" <groan>

Before you throw those rotten vegetables, know that players can come back with their own puns and gripes. In fact, many follow up their answers with clever comments. A reply to the question "Name a US president from Ohio," might be GARFIELD: PRESIDENTS HATE MONDAYS! Creativity is the key here. "If you find someone whose sense of humor matches your own, the fun of the game is in the comments," according to Ace. "I've played with people whose editorial remarks about the questions or contrived reasons why they didn't know the answers left me too broken up to type straight."

The camaraderie among the small cluster of regulars seems to be the game's most enduring element, lasting long after all of the <rofl>ing (CBese for "rolling on the floor laughing") has died down. Conversations in the YGI! lobby and the game's two sections in the Multi-Player Games Forum (GO MPGAMES) have yielded real-life group encounters and even several marriages. Says Ace, half of the most recent YGI! matrimonial pairing, "There are players who are consistently lousy at the game, but like to play it anyway, ostensibly for the companionship it carries with it."

The game might even change your outlook on life, Vister believes (the kind of remark to which Bob Illuminati could make the self-deprecating retort, "I know YGI! changed my life—too bad it didn't change my clothes!"). "YGI! has helped my personal development, so to speak, because once I realized there's a lecher like Bob in the world, my self-image improved just by virtue of the fact that I wasn't him!"

Christopher Galvin is an assistant editor of CompuServe Magazine.

Jumping into the Fray

Well, you've spun through the revolving glass door of YGII's Studio 3-C and stepped into the lobby. Now what? You're really just inside something resembling a forum conference room, where your likely teammates or opponents are mingling a bit. Type /HELP to get a complete list of available commands. Then introduce yourself.

Matches last about 30 minutes and start on the quarter hour; a two-minute warning is provided to all lobby dwellers by Phil Vox. Want to just watch a game? Use the /VIEW command to pick a studio where one is in progress. If you'd like to play against one other person, post a challenge by entering the /DUEL command.

Team play requires some prearrangement: If you're heading up a side, get everyone's player number (each person is assigned one as they enter the lobby) before you type /CAPTAIN at Phil's warning prompt. You'll be led through a team as-

Me sembly sequence.

Suddenly you're onstage and the game begins. Bob Illuminati asks each player to utter something incredibly witty, then the questions start coming. Remember, you have 30 seconds to answer. Any one-liners or other forms of jocularity should be separated from your real answer by a colon (:).

If you lose points due to a near-miss in spelling or syntax, you can appeal to your fellow YGIers' judgments by issuing a challenge for the number of points (type /CHALLENGE2 or /C2 for a two-point loss following the "You Glitched It!" comeback). Democracy in action ensues, with all participating players and audience

A short time-out marks the halfway point of the game, and in case of a deadheat finish, Bob pulls out a tie-breaker. Good luck, and don't glitch it!

members voting on your protest.

-CG

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Tracking a Tempest

Storm's a-comin'! Keep tabs on it and important weather happenings.

One year ago, Hurricane Hugo's 150-mph thrust brought devastation to the South Carolina coast. But there was a relatively small loss of life. And that, in retrospect, is testimony to the advance notice residents and business owners received from weather forecasters

In the midst of another severe storm season, CompuServe offers a cloudburst of meteorological intelligence, direct from the National Weather Service and other in-the-know sources, to help you stay on top of the latest crucial developments and hour-by-hour changes.

If the weather becomes news, accessing AP Online Weather (GO APV, Option 2) will give you not only an hourly summary of the national weather picture and brief outlooks for US and international cities but will also delineate such headline-grabbing weather as Hugo's wrath. Such feature stories appear alongside the regular updates on the AP Online Weather menu, and coverage ranges from important weather events, such as hurricanes and floods, to recreational reports.

But for the most detailed weather information, head for the National Weather Service's Public Weather menu (GO WEATHER). For details on what's available on the NWS menu, see page 40. For your local or destination forecast, enter either the three-letter "identifier" code for the major metropolitan airport (for example, LAX is Los Angeles

International), or the city name followed by the two-letter state code (Los Angeles, CA). Typing just the state code (CA) will yield forecasts from all major NWS reporting stations in that state.

Can't remember the spelling? Type the first four letters of the city name (or less if you put an asterisk at the end of the entry) at the prompt. If more than one city begins with that prefix, you will be asked to pick from a list of possibilities.

Out-of-the-way places have weather, too, so enter almost any small town name with its state code to call up the regional or "zone" outlook for that part of the state. If you're confused about the type of identifier required, type HELP at the ID prompt. (See the accompanying box for a list of what's available on the NWS menu.)

CompuServe's travel services also offer weather options on their main menus. Easy Sabre (GO SABRE) provides current conditions, same-day and next-day forecasts for the stated city; Travelshopper (GO PARS) gives the expected high and low temperatures and conditions; and The Official Airline Guide's Electronic Edition (GO OAG) brings you the latest observations from international points, including Central and South America, Mexico and the Caribbean. Also included are short-term forecasts for US and Canadian cities.

Also available online are high-resolution color and black-and-white maps (GO MAPS)

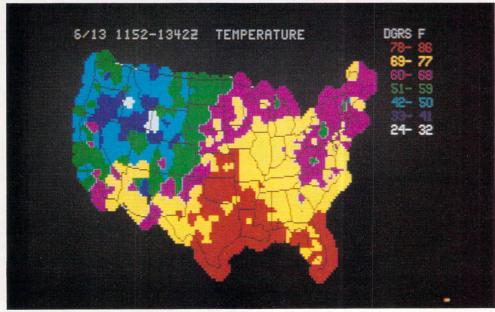
like those shown on your local TV news. To view the maps, however, your terminal must be using a communications software package that is compatible with GIF (Graphic Interchange Format) graphics. Front-end systems for CompuServe allow you to see the maps while online, and download them for later use.

There are also shareware decoder utilities that require you to first download the graphics files and then view the maps offline. The most popular program is SHWGIF.EXE ("Decoders and Encoders") in Library 3 of the Graphics Support Forum (GO GRAPHSUPPORT).

The maps include a national radar map, a surface weather map, a color temperature chart and an aviation weather depiction map. A non-graphic radar map (Option 3 on the MAPS menu or type GO EMI-6) is available from EMI Aviation, and requires only an 80-column printer. Numbers instead of colors indicate the intensity of precipitation.

And finally, if you're in the middle of The Mall, or any other online area, searching for that belated birthday gift you never got around to buying and curiosity urges you to know the local weather, don't bother exiting: just type WEA and you'll get the short-term forecast for your area from the nearest NWS station. Then press the Return key and you'll find yourself right where you left off after the forecast scrolls by.

Christopher Galvin is an assistant editor of CompuServe Magazine.



Finding the hot spots: Color temperature map

Just the Forecasts Ma'am

Following is a list of what's available on the NWS Menu.

- Short-Term Forecast (SF). This provides the current 24- to 48-hour outlook for the area you request and is updated four times daily.
- Extended Forecast (EF). The three- to five-day prediction (enter just the state code) or the six- to 10-day prospects for the entire country (type NAT at the ID prompt) are given.
- Severe Weather Alerts (SW). This option moves as fast as the storms do, being updated as often as conditions warrant. The last five alerts issued for the city or state you request (plus alerts from neighboring states if applicable) are displayed. Also available are two national severe-weather reports. Type HUR at the SW ID prompt to call up hurricane advisories from the National Hurricane Center in Miami, Fla.; typing WAT at the prompt retrieves information on storm watches and warnings from the National Severe

Storms Forecast Center in Kansas City.

- Precipitation Probability (PP). This report gives two- or three-day forecasts of expected skies, temperature and chance of precipitation for certain cities in the requested state.
- Daily Climatological Reports (CL). Issued for major metropolitan areas, these reports include statistics on the previous day's weather: high, low and average temperature with comparison to normals and records; heating and cooling degree days; rain or snowfall totals, etc.
- State Weather Summary (SS). Updated daily, this report describes observed statewide weather patterns from the previous evening, as well as expected patterns for the current and following days.
- Sports and Recreation (SP). This option specifies conditions in major recreational locations, such as the national parks and ski areas. For a look at the places covered here, type LIST at

the ID prompt.

- Marine Forecasts (MF). Forecasts, water and wind conditions, and small craft, gale and other warnings for coastal waters are offered in this report. To see a list of all available reporting stations, type LIST at the prompt.
- Aviation Weather menu (Option 9 on the Public Weather menu or GO AWX). This is a pilot's best friend. Updated continuously with the same information provided by International Flight Service stations, this menu includes hourly reports and forecasts from specified airport terminals, NOTAMS, PIREPS, SIGMETS, AIRMETS and radar summaries. Airline passengers curious about possible inclement conditions at their departure site but unfamiliar with "aviationspeak" can call on help menus to decipher the complicated codes. Similar information is also available as an Abbreviated Local Summary from EMI Aviation Services (GO EMI).

Come and get it.

A special DOS insert in this November's CompuServe Magazine.

Favorite files, quick reference tables and a buyers guide are just some of what's in store for you.

To get this special insert, stop by and join the IBM New Users Forum (GO IBMNEW) before September 1. Active members of any IBM-related forum will automatically get the insert.

You Think You Got It Bad?

For the last nine years, David Hickcox has been tracking the annual hottest and coldest spots in the nation. He's not planning a really weird vacation—he's a geography professor at Ohio Wesleyan University.

"There's always going to be one or two places that have the hottest or coldest readings," Hickcox says. "It depends on how air masses are affecting the country on a given day."

Extremes of cold are widespread and are usually found at night in high elevations, particularly the Rocky Mountains, where heat from the day is lost to clear skies and cold air drains down the slopes. Cold, cold temperatures also are common to Great Plains states and northern Maine, usually the first locales to endure arctic blasts from Canada.

Extremely hot temperatures, however, occur in a more concentrated pattern that varies by time of the year: southern Florida in winter, the lower Rio Grande valley in Texas from spring to fall, and the lower Colorado valley (Arizona, Nevada and southwest California) at the height of summer.

Hickcox disregards Death Valley, which

usually reigns supreme in July with readings in the 120s, as a climatological fluke. "It's 281 feet below sea level, on the lee side of a 12,000-foot mountain range, and located very far south, where hot air is constantly imported from Mexico. It's too unusual."

That's OK, we've still included it on his list of places most often recording the daily US high or low temperatures in 1989. We've included the NWS zone code for each town, so you can call up their local short-term forecast (Option 1 on the NWS Public Weather menu) and suddenly feel much better about your own.

Hot Spots:
Death Valley, Calif. CA019
Borrego Springs and Palm Springs,
Calif.

CA018
Bullhead City, Ariz. AZ001
Laredo and McAllen, Texas TX041
Cold Spots:
Gunnison, Colo. CO005

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-CG

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Computers: Apple Macintosh II family or Macintosh SE/30.

Operating System: Macintosh System 6.x or later

Features: External SCSI controller with hardwired terminator, cable and plug-in power transformer; handheld scanner has side-mounted bright/normal selector, top-mounted scan button, wide guide roller, white scanning light and 2.5-inch scan width; scanning software provides true 256-color, dithered 4,096-color, 16-level grayscale and 256-level gray-scale image creation; software includes image filters, gamma correction, palette control and a "gather" function for assembling scanned strips

Options: None.Model Tested: ClearScan Model 300-MCO connected to 5MB Macintosh IIcx having FDHD diskette drive, 40MB hard disk, Ehman 45MB SyQuest cartridge drive, dual Bernoulli Box II/44 cartridge drives, Thunder-Ware LightningScan handheld scanner, Apple-Color High-Resolution RGB Monitor and 256-color Macintosh II Video Card; running System 6.0.4, Finder 6.1.4 and 32-Bit Color QuickDraw.

Price: \$495

Being accustomed to black-and-white and 32-level grayscale handscanners, I wasn't prepared for the thrill of true 256-color scanning with NCL America's Model 300-MCO ClearScan handheld scanner. Hundreds of scans later, I still get excited, and color scanning is changing the way I work.

ClearScan doesn't have the usual T-shaped scanning head. Although its packaging depicts a T-shaped scanner, the actual unit resembles an oversized mouse. The shape encourages cupping a hand over the top so fingertips rest on a top-mounted scan button, which has advantages over gripping a scanner on the sides. It can be controlled with the left or right hand, there's less tendency to twist the unit while scanning, and only a light touch is needed, promoting smoother scanning.

ClearScan uses white light to "see" all colors in an original image. Unlike scanners using red or yellow-green light, ClearScan demonstrates no lack of sensitivity to any colors. However, non-color scanners usually have viewing windows so users can see the progress over images. ClearScan's white light and sensitivity to all colors precludes a

viewing window, so positioning and movement must be done "blind" except for computer display. With the original hidden under the scanner, it can be tricky to align the scanner and accurately determine starting and stopping points. I often needed repeated scans to zero-in on the position and track I wanted.

Nevertheless, scan quality has been excellent—far better than expected. The unit tracks smoothly, with little tendency to skew sideways. Scanning too fast can distort an image, but there's no problem with scanning too slow. ClearScan doesn't even seem overly sensitive to jiggles when guides on the bottom run over edges of originals; I couldn't even find the jiggles in most finished images.

Color rendering has been outstanding, even in small details and delicate shading. I have seen interference patterns in some images, notably in flesh tones. But they seemed to be caused by original images, not the scanner, and they've varied from one source to another.

Raw scans fed to ClearScan's software aren't finished images. The software's "create image" function uses the raw data to make images in undithered 256 colors, dithered 4,096 colors, 16-level grayscales or 256-level grayscales. The user can even specify two to four image types at once, and the program will create each in its own window. Raw scans can be saved to disk. Finished images can be output as PICT, 8-bit grayscale TIFF, 24-bit color TIFF or black-and-white MacPaint files acceptable to other applications, including PageMaker and QuarkXPress.

ClearScan's software offers some image enhancements. Images can be rotated in 90-degree increments. Colors can be reversed or warmed, cooled, lightened, darkened, thinned or enriched. Thinning was useful for reducing color intensity without altering color balance. Gamma correction adjusts sensitivity in interpreting RGB color values, and it's particularly useful for special effects. Although lacking retouching tools, the program has filters to blur, sharpen edges, reduce noise, shadow or dither images. However, I found them somewhat slow and heavy-handed. Filters often overcorrected, so operations like reducing noise made images too blocky for my taste. I prefer other enhancement software, but many users could get by with ClearScan's tools.

A handicap to all this is ClearScan's limited scan size. The hardware only scans a swath 2.5 inches wide, and the software doesn't allow more than a five-inch length even in large-memory computers. To partially compensate, the software has a powerful "gather" function for aligning and assembling multiple strips as larger images.

Of course, gathering relies on strips overlapping other strips scanned at the same angle. Consistent scanning is difficult with any handscanner, and small tracking deviations between strips can defeat the gathering operation. Worse, strips cannot be rotated by the software to compensate for such small tracking errors. Future software could benefit from a free-rotation feature or even computerized pattern matching that would detect strips in proximity and lock them precisely into place.

I did have trouble connecting the hardware. When I first inserted ClearScan midway in a SCSI chain, all devices except ClearScan worked. The manufacturer says the control box has SCSI termination hardwired to its internal circuit board and must be the last device in the chain. After reluctantly removing another device that also had hardwired termination and placing the ClearScan at the end, my computer wouldn't boot at all. I still had to use an external terminator (not included) on the ClearScan before my system would operate. I object to internal SCSI termination in any device. If a user acquires more than one such unit, internal terminators inevitably cause nothing but trouble.

Once operational, ClearScan is a delight despite the small scanning size. Even when color isn't needed, its 256-level grayscales outshine the best 32-level grayscales I've obtained from lesser units. For color or grayscale applications, however, ClearScan provides excellent results on small images without the high cost of a desktop scanner. But ClearScan has no provision for high-contrast line art such as pen-and-ink drawings, except as grayscale or dithered images heavily darkened by the software. Other scanners seem better for line art, so I keep two handscanners connected to my computer to meet both needs.

Reviewed by Ernest E. Mau

Ernest E. Mau, a full-time, free-lance writer and Compu-Serve Magazine reviews editor, is based in Aurora, Colo. He is the author of several books and more than 300 articles on microcomputer products and applications.

DrawPerfect:

Picture-perfect Pix for WordPerfect Files

WordPerfect Corp.

288 West Center St. Orem, UT 84057 801/ 225-5000 or Canada: 800/267-1731 Fax: 801/ 227-4477

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Supplied as dual-media package on 5.25-inch diskettes and 3.5-inch diskettes; requires two high-density 720K (or larger) diskette drives or one 360K diskette drive and a hard disk.

Copy Protection: None.

Required Peripherals: CGA, EGA, VGA, MCGA or compatible video adapter; also supports "super" adapters.

Other Requirements: Minimum 384K RAM.

Optional Items: Color monitor; printer (any dot-matrix, laser or color printer); film recorder; pen plotter; mouse; Holiday Pack or Business Pack figure libraries.

System used for test: 640K IBM-compatible turbo-XT with Paradise AutoSwitch EGA 480 graphics card Plus, 360K diskette drive, 1.4MB HD microfloppy drive and 40MB hard disk; running PC-DOS 3.3.

List Prices: \$495 (\$645 Canadian) for DrawPerfect; \$295 (\$385 Canadian) for each network station; \$129 (\$167 Canadian) for optional figure libraries.

If you need software that produces professional-quality visual aids, Draw-Perfect (version 1.0) may be what you're seeking. Designed to be compatible with WordPerfect 5.0 and 5.1, this product should probably be on the top of your evaluation list if you already use that word processor.

DrawPerfect installation is a snap. It comes with an auto-install program that leads new users through a simple question-and-answer session. At the end of that session, DrawPerfect is ready to go.

The DrawPerfect Figure Library and a copy of the WordPerfect Office 3.0 Shell are bundled with DrawPerfect. The Figure Library is a collection of more than 500 art images that can be used with both DrawPerfect 1.0 and WordPerfect 5.0 or higher. Each image is displayed in a hardcover book separate from the DrawPerfect manual. This visual presentation makes it simple to choose the right image without the need to computer scan the entire disk-based library.

However, here's a neat trick to scan the library. Each subsection of images (symbols, sports, maps and more) resides in a separate subdirectory. Since Draw-Perfect uses the List Files feature the same way WordPerfect does, you can choose the Look option and see an actual image on screen. Then, by using PgUp and PgDown keys, you can scroll through all images in the directory. When you see an image you want in a document, simply retrieve it.

The same procedure also works on imported formats. DrawPerfect can import graphic files from

CGM, DHP, DXF, GEM, IMG, HPGL, MSP, PCX, PIC, PNTG, PPIC, TIFF and WPG. Files can be exported in CGM, HPGL, SCODL, WPG and VideoShow formats.

The WordPerfect Office 3.0 Shell integrates WordPerfect and DrawPerfect. Among other capabilities, the shell makes it easy to jump between programs. Particularly useful are several precoded macros, accessed with a single keystroke, that allow graphics and text to be instantaneously swapped between WordPerfect and DrawPerfect.

If you're a WordPerfect user, it doesn't take long to come up to speed with Draw-Perfect. It took me only a few hours to get into the swing of using this graphics package. Most frequently used function keys have the same effect in WordPerfect and DrawPerfect, and keys for cursor movement are identical. Yet regardless of its ability to integrate with WordPerfect, DrawPerfect is a stand-alone product.

As might be expected, text editing with DrawPerfect follows the WordPerfect model. However, users of other word processors should find text manipulation simple enough to learn within a short time.

Although not a "paint" package, Draw-Perfect does have drawing capabilities. The tools within the software allow freehand drawing as well as other standard structures such as lines, arcs, curves, polygons, boxes, circles and ellipses. To discriminate among constructions, DrawPerfect has 64 fill patterns, 16 line styles and widths, and 256 colors. Of course, all these capabilities are accessible through a mouse or through keyboard interaction with pull-down menus.

Once a figure from the library (or import



14 formats: AutoCAD, DrawPerfect graphics brighten WordPerfect text: Screen

file) is selected, it can be easily sized, rotated, inverted, moved and otherwise stretched or modified. Notwithstanding all this manipulative ability, most users will find it bothersome to wholly construct their own images. DrawPerfect's vector graphics don't really lend themselves to creating complicated original art.

Once graphics have been created, Draw-Perfect allows a number of presentations. Images can be printed out on transparencies for overhead presentations, sent to a commercial service for preparation of slides or viewed on the screen.

A screen show is particularly impressive because it shows off the software at its best. For instance, images can be linked in a file and automatically displayed with a preset time delay between each image. As one image replaces the previous, DrawPerfect allows several options including fade in, sweep in and sweep out. The screen also can display a shaded background that fades from one color to another. During the presentation, files can overlay one another so new data or an additional image can be added to an existing screen.

Graphics can be a help when you're trying to communicate with others. While tables of figures can be perplexing and lengthy explanations boring, a succinct graphic can cut through the confusion. If you think professional-looking graphics could make a difference in your presentations, DrawPerfect certainly is worth a look. ◀

Reviewed by James Moran

James Moran is a free-lance writer and frequent contributor to CompuServe Magazine.

Reviews Online

Following are summaries of hardware and software reviews available for reading this month in *Online Today*. To read the complete reviews, type GO OLT-200 at any CompuServe Information Service prompt. For additional *CompuServe Magazine! Online Today* reviews published during the past two years, refer to the keyword-searchable buyer's guide in Library 5 of the OLT Forum (GO OLTFORUM).

Hardware

Tandy 2800HD Portable Computer

Tandy's 2800HD Portable Computer features battery-powered IBM compatibility, a hard disk, a backlit supertwist LCD display and switchable 6 MHz or 12 MHz speeds. Hardin and Christy Brothers find that the computer performs as well as expected or better for applications not needing extended memory and that it operates much like a speedy PC-XT compatible. GO OLT-3010

LaserJet III Printer

The LaserJet III, Hewlett-Packard's latest laser printer, can print eight pages per minute. It features 1MB of memory (expandable to 4MB), parallel and serial interfaces, two font cartridge slots, eight scalable typefaces and 14 bit-mapped fonts. Reviewer Harry Green notes that it shares the same print and font cartridges used in a LaserJet II, but enhancements give the LaserJet III a whole new heart. GO OLT-3015

Color ComputerEyes/Pro Video Digitizer

Digital Vision's 24-bit ComputerEyes/Pro does color and gray-scale video digitizing for Macintosh (or IBM-compatible) computers. Although the comparatively low-cost device isn't a "frame grabber," reviewer Ernest Mau appreciates its acceptance of composite and S-video inputs from consumer or professional sources for acquiring desktop publishing or other images. GO OLT-3020

MacRecorder Sound Digitizer

Farallon Computing's MacRecorder 2.0 digitizes sounds through a microphone or hardwired connections. Reviewer Anthony Watkins says the handheld sound input device, selectable sampling rates and versatile sound editing software combine well to generate sound resources for practical Macintosh applications such as desktop multimedia presentations. GO OLT-3025

Zoom HC2400R Modem

Zoom Telephonics' low-cost HC2400R external modem operates with any computer having a serial port, but bundled Procomm software is only for IBM-compatibles. Re-

viewer Harry Green says this non-MNP, 2400-baud modem is easy to connect, easy to use and features full compatibility with the Hayes "AT" command set. *GO OLT-3035*

Baud Bandit Modem with MNP Error Control

Progressive Peripherals' inexpensive Baud Bandit external modem is usable with any computer having a serial port. Using a Commodore Amiga, reviewer Cheryl Peterson finds its 300-, 1200- and 2400-baud operation reliable. Support for MNP Levels 2 through 5 is useful for ASCII communications on noisy lines but high MNP levels may slow file transfers governed by redundant software protocols. GO OLT-3050

The WIZ Mouse/Digitizer Combination

CalComp's mouse/digitizer combination, The WIZ, makes grand claims, but reviewer Christy Brothers says it's easy to get carried away by the slick advertising. Although the device has some good points, Brothers finds it isn't completely compatible with a Microsoft Mouse, lacks template creation facilities and suffers from consistently erratic performance. GO OLT-3055

Software

PICTure This

FGM's PICTure converts alien graphic files, mostly from IBM-compatible and Amiga computers, to Macintosh PICT or PICT2 formats. Reviewer Ernest Mau admires the program for tackling the problem and considers it worthwhile for extending sources of Macintosh graphics, but he also finds some incompatibilities and shortcomings that keep the program from being a universal converter. GO OLT-3065

PC Paintbrush IV Plus Graphics

Z-Soft's PC Paintbrush IV Plus for IBM-compatibles expands paint-type graphics. Reviewer William Lynott says that, among other enhancements, new scanning support is astonishingly simple to use and has slick features. He also says that additional editing tools and large image support contribute to making this a bargain among paint-type programs. GO OLT-3075

Applause II Presentation Graphics

Ashton-Tate's Applause II joins the top guns in presentation graphics for IBM-compatibles. According to reviewer William Lynott, this major overhaul of the 1988-vintage Draw Applause retains many of the best features of its predecessor but addresses shortcomings that sometimes disappointed earlier users. GO OLT-3085

Touch-Up Graphics Creator and Editor

Migraph's Touch-Up runs under the GEM/3 Desktop on IBM-compatibles to create, edit and enhance graphic images. In his review, Harry Green says this excellent program is similar in operation to GEM's own drawing tools but still lacks a few tools. Among its six modes, each with specific applications, is one for handheld or page scanners and their images. GO OLT-3090

StoryBoard Plus Presentation Graphics

IBM's StoryBoard Plus helps create color graphic or text presentations that can be run on personal computers, shown with video projectors or transferred to other media. Reviewer Brian Monahan says this is an outstanding tool for using IBM-compatible personal computers to develop presentations. GO OLT-3095

The Collector

Almost everybody collects something, and The Collector from The Third Rail helps manage those things on IBM-compatible computers. Anthony Watkins uses his toy train collection as the basis of this review, finding that the friendly database accommodates everyone from casual to serious collectors of stamps, coins, baseball cards, thimbles or almost anything else. *GO OLT-4000*

Abra Cadabra Software Programs

Abra Cadabra Software's Abra 2000 and Abratrak programs eliminate much of the clerical work from human resource reporting and applicant tracking. Reviewer James Moran gives high marks to both IBM-compatible programs for functionality, performance and reporting capabilities. They're simple enough for small organizations but comprehensive enough for large companies. GO OLT-4005 and OLT-4010

PagePak Page Layout Templates

Marketing Graphics' PagePak provides a collection of page layout templates for WordPerfect, PageMaker or Ventura Publisher running on IBM-compatibles. Reviewer William Lynott says the templates are mostly practical designs for business situations, and they're formatted to take advantage of the layout software. GO OLT-4015

CygnusEd Professional Editing System

ASDG's CygnusEd Professional is a refined text editor for the Commodore Amiga. In her review, Cheryl Peterson says it's aimed at users who want powerful editing with good features, but it probably won't replace a word processor. It saves time and memory for routine editing tasks, and instant accessibility is a real plus. GO OLT-4020

For the Best in Computer Books GO WB

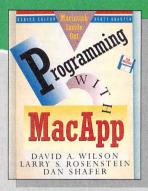
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AT&T UNIX System V Release 4 Series: Programmer's Reference Manual. Detailed, no nonsense description of commands, features and facilities of UNIX. Prentice Hall. \$39.96



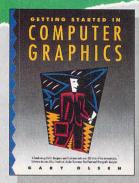
Once Upon a Time in ComputerLand. The riveting story of the spectacular rise and fall of ComputerLand's eccentric founder, Bill Millard. By Jonathan Littman. Simon & Schuster. \$11.95



Programming with MacApp. This book/disk package is a hands-on tutorial covering Macintosh program design and development. By David A. Wilson, Larry S. Rosenstein & Dan Shafer. Addison-Wesley. \$34.95



UNIX Shell Programming, 2nd Edition. Power users get the latest techniques in shell scripting to customize the UNIX environment. By Lowell Jay Arthur. Wiley. \$26.95



Getting Started in Computer Graphics. Move your design and drawing skills to the screen with this comprehensive, step-by-step guide. Gary Olsen. North Light Books. \$27.95



i486 Microprocessor Programmer's Reference Manual. High-level programmers and software developers get in-depth details of i486 microprocessor architecture. Intel Corporation. \$24.95

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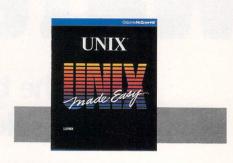
Book Reviews

Following are summaries of book reviews available for reading this month in *Online Today*. To read the complete reviews, type GO OLT-240 at any CompuServe Information Service prompt.

Working with Word (Second Edition)

By Chris Kinata and Gordon McComb (Second Edition by Chris Kinata) Microsoft Press, 1989 752 pages, \$21.95 (softcover)

Designed for intermediate users of Microsoft Word for the Apple Macintosh, this text is one you shouldn't be without, says reviewer Sharon Kahn, who especially praises the volume for its organization and excellent examples. *GO OLT-5920*



Unix Made Easy

By Lurnix Osborne/McGraw-Hill 992 pages, \$24.95 (softcover)

This self-teaching manual into the ABCs of Unix offers complete explanations of the features of this operating system as well as a series of exercises that solidify the concepts. Although reviewer Harry Green says that Unix made easy is an oxymoron, he admits that this book comes close. *GO OLT-5950*



The One-Minute Commuter

By Lis Fleming Fleming, LTD, 1989 103 pages, \$9.95 (softcover)

Written for those who want to keep their jobs but stay at home telecommuting, this small volume is penned by an expert in the field. Calling it a plow horse, reviewer Susan Katz praises the book for the specific information it offers as well as the inspiring stories of successful telecommuters, but faults it for not being richer and fuller. *GO OLT-5900*



1-2-3 Business Applications

By Thomas Miezejeski Que Corp., 1989 464 pages, \$39.95 (softcover)

If you want to tap the full power of the incredibly complex Lotus 1-2-3, release 2.2, just use menu-driven models constructed by someone who is an expert. You'll find that expert in the author of this combination book and software package, which reviewer William J. Lynott recommends for advanced 1-2-3 users. GO OLT-5930

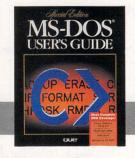


Encyclopedia Macintosh

By Craig Danuloff and Deke McClelland Sybex, 1990

782 pages, \$24.95 (softcover)

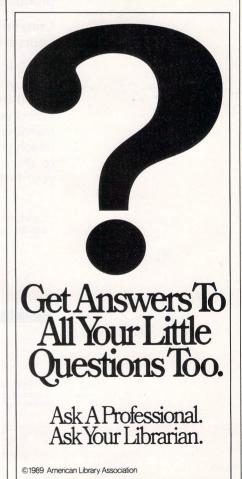
Organized into five major sections, this encyclopedia contains tips, explanations and product reviews on just about anything you'll ever want to know about the Apple Macintosh. Reviewer James Moran says this is one of the best computer books he has seen in years. *GO OLT-5910*



MS-DOS User's Guide

By David W. Solomon, Caroline M. Halliday, David D. Busch and Timothy S. Stanley Que Corp., 1989 882 pages, \$29.95 (softcover)

With a full exploration of DOS versions 3.0 through 4.0, this book will benefit anyone who needs to understand DOS. However, reviewer James Moran finds fault with the thin paper and high price. *GO OLT-5940*



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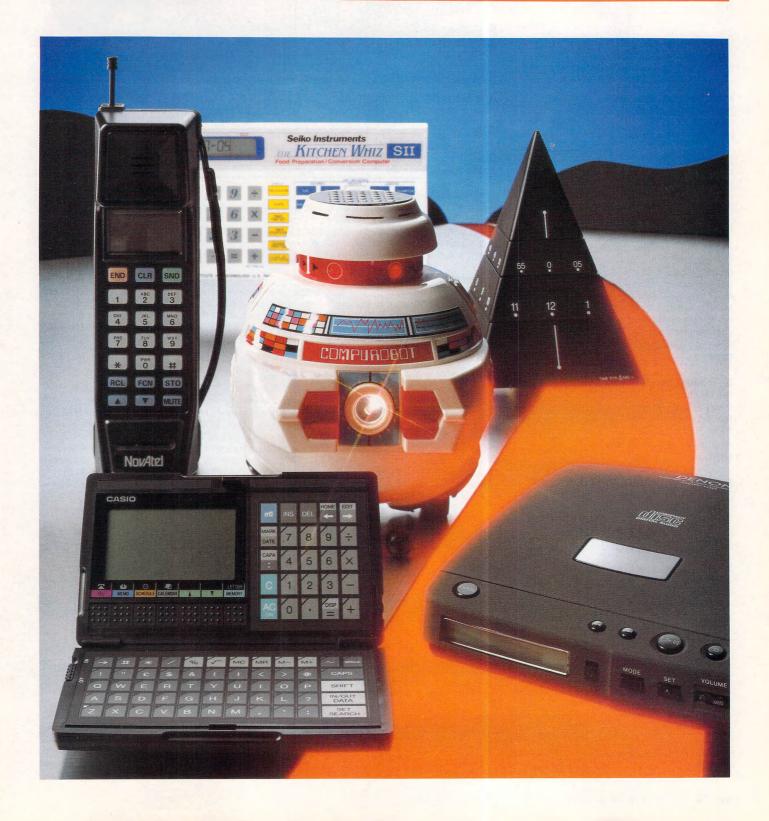


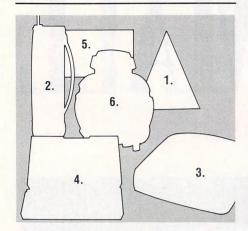
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GOMALL SHOPPERS' GUIDE





Cellular phones. CD players. Computers. High technology has changed the way we live and do business. High-tech toys for girls and boys of all ages are featured in this issue.

1. Pyramid clock.

Moving sculpture/timepiece changes form as it tells time. Composes a perfect pyramid every three hours. Battery included. From Sharon Luggage and Gifts. GO SL \$39.95.

2. NovAtel® cellular phone.

Compact, all-in-one, fully portable phone with rechargeable battery. Features include full 0.6-watt power for maximum power and optimum clarity, 99-number memory with last-number redial, internal and retractable exterior antennas for clear reception. 832 channels for easy access to open lines. From JCPenney. GO JCP \$599.99.

3. The best portable CD player.

Denon shock-mounted laser assembly/ transport mechanism reduces skipping and reading errors. Features 32-selection programming. Rechargeable battery pack included. From Hammacher Schlemmer. GO HS \$399.

4. Casio Digital Diary with 32K memory. Stores about 1,500 phone numbers. Manages appointments with daily, weekly and monthly calendar through 2099. Includes calculator. From The Stationery Center. GO SC

5. Seiko Instruments' Kitchen Whiz.

\$129.95.

Food preparation conversion computer features seven amazing functions for the serious cook. Includes kitchen timer with alarm, a clock and calendar. Uses AA batteries, included. From The Chef's Catalog. GO CC Sale price: \$29.99.

6. Robot World educational toys.

MOVIT series of computerized and logic-controlled, battery-powered robot kits, which teach the basic principles of robotic sensing and locomotion. Pictured here, Compurobot II (\$69.95). Robo Duck robot (\$29.95) also available.

From Some Things Special Unique Boutique. GO SP



Ford Motor Co. Spotlights Mercury Capri.

Capri is the brand new sport convertible from Mercury that comes in five popular colors and a soft top or optional hard top. Mercury Capri offers many standard features, such as power windows, lumbar support, disk brakes and driver's side air bag, which are optional in other cars. In addition, the XR2 model is turbocharged for those who really want to get away. Bring three friends along for the ride. For more details, visit the Ford/Lincoln-Mercury Electronic Showroom, GO FORD.

Austad's End-of-Summer Sale.

Save 15 percent to 30 percent on a wide array of golfing goods at Austad's Golf Shop, the world's leading golf catalog. Request a free copy of Austad's sale catalog. Browse Austad's online bargains, too. Austad's Golf Shop offers golf equipment, accessories, shoes, clothing and rainwear. Also find golf gifts galore, ranging from personalized tees to gold-plated putters. To shop and request your free sale catalog, GO AU.

Summer Sidewalk Sale continues.

The sale goes on! Stop by The Mall for bargains on everything from kitchen tools to computer kitsch, from sportswear to software. Prices have been slashed on books, CDs, toys, gourmet foods, gadgets and more. "Sale tables" for Macintosh and IBM owners, too. For rock-bottom prices, check out the "\$10-and-under table." Connect time in the Sidewalk Sale database has been cut 50 percent, too. To shop the Summer Sidewalk Sale, GO MALL and select "Summer Sidewalk Sale" from the top Mall menu.

AT&T Toll-Free 800 Directory ... at your service.

The Earthquake Preparedness Society ... NY State Police 12 Most-Wanted List ... Prayer Hotline to Jerusalem. For these and hundreds of other toll-free numbers for Consumer and Public Services, visit AT&T Toll-Free 800 Directory—connect-time free! To look up an 800 number, select "Product/Service Category Search." Then select "Consumer and Public Services" for thousands of helpful listings for everything from adoption services, senior citizens organizations and missing persons bureaus to warranty administration services. Narrow your search by state, or browse the whole list. Search by company name, too. Remember, connect time is always free at AT&T Toll-Free 800 Directory. From the FAA Consumer Hotline to the National Runaway Hotline, help is only a keystroke away. To browse the AT&T Toll-Free 800 Directory, GO ATT.

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Go online to order items pictured in *Go Mall* by typing 99 after any Mall Merchant's GO command. For example, select an item featured on the cover, type the merchant's GO command followed by 99 (i.e., GO JCP99) and zip to a list of featured products.

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Take advantage of **free connect** time in your favorite Mall stores and explore new merchants, too. For a schedule of **free connect** time, see *Goings-On At A Glance* on page 58.

What the heck is "free connect"?

When you browse in participating merchants' online stores during sponsored **free connect** time, you pay **no** standard CompuServe connect-time rates while shopping in that store. Although applicable communications surcharges *remain in effect*. An up-to-date list of free connect time always can be found online in 'This Week's Mall News.'

Go Mall, published monthly in CompuServe Magazine, is a shoppers guide for The Electronic Mall, a service of CompuServe Incorporated. For more information call 614/457-8600.

Editors: Cindy Morgan, Denise Erwin Anderson and Pam Busch.
Art Director: Thom Misiak.
Design: Dorothy Hogan.

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For the latest in home entertainment, electronics and office equipment, there's no place like Sears. Enter the world of Nintendo with the Nintendo Action Set (A) for \$99.99. Experience the ultimate in game-playing with the new 16-bit Sega Genesis (B) for \$189.95. Stock up on video cartridges, including redhot new releases, such as Phantasy Star II (\$74.95) and Double Dragon II (\$48.97). An avalanche of VHS videos are also offered online, including four great Godzilla classics for only \$9.95 each—a real steal! Pick up Rambo, RoboCop or Crocodile Dundee. Take home a Disney favorite, such as Bambi, Dumbo or Mary Poppins. Play ball with Baseball Funnies, Basketball Bloopers or Pro Football Funnies. Sears offers more than 200 titles.

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Monthly values, seasonal catalogs.

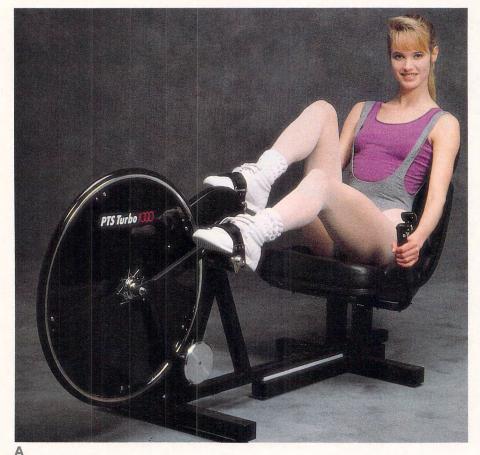
See Sears' "Monthly Values," too. Each month, Sears features more than 50 selected items. Shoppers can also order Sears Fall Home and Style books online. America's favorite catalogs are filled with fashion, home furnishings, shoes, accessories, appliances, electronics, toys and more. The set is only \$5 and includes a \$6 merchandise coupon. Order other Sears catalogs electronically, too. Pay for your purchases with the SearsCharge or Discover cards. Not a current SearsCharge customer? Request an application, toll-free at 1-800-323-3274. Discover what Sears has in store for you today. GO SEARS.

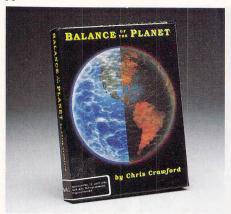
Sears' grand-opening, free-connect weekend is Aug. 4 and 5.















HOT TICKETS

New for the '90s.

A. Pro-Tec's PTS Turbo 1000 bike.

The patented PTS Turbo 1000 features readouts of MPH, average speed, time and distance. Unique design lets you ride with feet at heart level. Lightweight, adjustable and portable, the PTS Turbo is shipped fully assembled and comes with a two-year, institutional-use warranty. 84-inch length, 26-inch width and 32-inch height. PTS Turbo 1000 upper-body attachment (\$299) available.

From Push Pedal Pull Fitness. GO PPP **\$995** plus shipping.

B. Balance of the Planet by Accolade.

From Chris Crawford, the creator of *Balance* of *Power*, comes a powerful new game where you solve the earth's environmental problems. More than 150 factors to consider. For IBM and Macintosh.

From Software Discounters of America. GO SDA \$32.

PollenAire filters.

The world's finest electrostatic air filters. Remove 90 percent of the fungi, mold, lint, animal hair, pollen, dust, smoke, bacteria and other hidden particles in the air you breathe. Built to last a lifetime. Easy to clean and install. From Prevention Systems. GO PS

Sale price: \$110.

DOLLARS OFF

Super savings and sales.

C. Radio Doctors' Summer Sound Sale.

August only! Take \$1 off any CD, including new releases and all special orders. For even bigger discounts, browse the CBS Best-Value Bin. Save on regularly priced \$5.99 tapes and \$10.99 CDs. Now buy three tapes for \$15 and three CDs for \$30. Select from The Rolling Stones, New Kids on the Block, Journey, Ozzy Osbourne, Bob Dylan and more. From Radio Doctors. GO RD

D. Whistler® 225 radar detector.

Road-ready radar detector responds to radar transmissions with a distinctive audible alarm and a three-part LED display. Convenient dash or visor mounting.

From JCPenney. GO JCP **\$64.99.**

DigiTech GSP-5 guitar effects.

Signal processor delivers 16 studio-quality guitar effects—up to five playable at once. Also offers MIDI continuous control. Comes with foot-control pedal for access to effects during live performances.

From Discount Music Supply. GO DMS List price: \$449.95. Sale price: \$349.95.

SEASONAL PICKS

Back to school.

A. Electronic WordFinder.

A hand-held electronic dictionary and thesaurus from Microlytics. Contains 4.5MB of information, including spelling words, 50,000 definitions and 220,000 synonyms.

From MacWarehouse. GO MW \$59.

B. A spare pair.

Going back to school? Pack a spare pair of contact lenses. Contact Lens Supply stocks lenses from all leading manufacturers, including Bausch & Lomb, Ciba, CooperVision, Sola/Barnes Hind, among others. Gas permeable and tinted lenses, too. All at low discount prices. Register your prescription today. Plus, order now and receive a free gift. From Contact Lens Supply. GO CL

C. Writing and Publishing Center from Learning Company.

Word processing and desktop publishing, designed specifically for ages 9 and older. Combines words and pictures effortlessly. Perfect for your child's term papers, stories and reports. Easy-to-use instructions and screen displays to coach new users every step of the way. IBM and compatibles. From Computer Express. GO CE \$45.47.

MEMBERS ONLY

Exceptional items.

D. Join America's largest discount shopping service online.

Save potentially thousands of dollars on everything from electronics to minks, from diamonds to power tools. Non-members can browse online and see the savings. Sorry, purchasing for members only. Easy online enrollment. Join and shop anytime.

A sample of members' super savings:

Save \$45: Toshiba digital personal stereo. Personal AM/FM tape player with drift-free

Personal AM/FM tape player with drift-free digital tuning, 10 station presets, headphones for joggers, clock, alarm, auto-reverse, threeband equalizer and vibration-free, anti-rolling mechanism. Model KT4538.

From Shoppers Advantage Club. GO SAC List price: \$109.

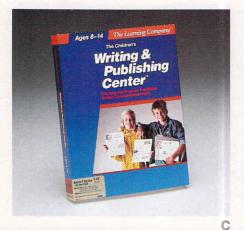
Members' price: \$59.

E. Online ordering for CD Club members.

Attention all CD Club members: Order online! Select from special sale listings, new releases and hundreds of classical, country, easy listening and hard and soft rock CDs. Place orders from the CD Club's print catalogs, too. Not a member? Join online today. New member bonus: Six CDs for the price of one. From CD Club. GO CD





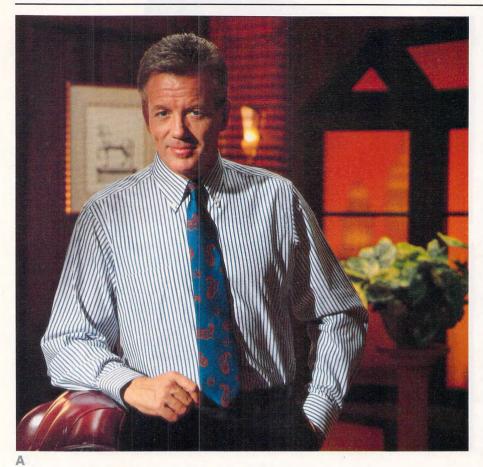






D

Sec.









A. Egyptian cotton broadcloth stripe shirt. 100 percent imported Egyptian cotton broadcloth in bold blue or red stripe. Generously cut, this exciting new shirt features 3%-inch button-down collar for the perfect "roll," "lyy League" back box pleat, left breast pocket, seven-button front and extra-long shirt tails. Order with confidence: Your satisfaction is 100 percent guaranteed. Free color catalog. From Paul Fredrick Shirts Co. GO PFS \$30.50 or two for \$59.

B. The cat collection.

For feline fanciers, a gathering of cat merchandise from the Museum's collection. A sleeping cat pin, sleeping cat tote bag and a collection of cat note cards are featured online. Pictured here, Steinlen cats porcelain mug. Adapted from a hand-colored lithograph by Theophile Steinlen (French, 1859 to 1923), this mug is dishwasher-safe.

From Museum of Fine Arts, Boston. GO FA List price: \$9.

Members' price: \$8.10.

C. 1930s Look Retro Watch for him.

Gold-plated contour wrist watch with a 1930s look. Small second hand, quartz movement and leather strap. From Switzerland.
From Brooks Brothers. GO BR

D. James Bond video series.

The complete collection of James Bond movies, featuring all four stars who have played 007—Sean Connery, Roger Moore, George Lazenby and Timothy Dalton.

From Time-Life Books, Music and Videos. GO TL

Keyboards at discount prices.

Major brand-name keyboards and modules at 15 percent to 30 percent off list prices. Featured keyboards include Korg M1 workstation (list: \$2,195; MAO price: \$1,450), E-Mu Profeus sound module (list: \$995; MAO price: \$745) and Kawai K-4 keyboard (list: \$1,495; MAO price: \$995). Also, more keyboards and modules from Casio, Ensoniq, E-Mu, Korg, Kawai and other major manufacturers. Computer interfaces and software from \$75.

New brand-name fashions.

Shop JCPenney for new men's lines, including Henry Grethel® and 417® by Van Heusen. Also, look for Levi's Dockers,® Haggar® and Chic® in the Women's Shop. Shop JCPenney free of connect-time fees Sept. 4 through 11. From JCPenney. GO JCP.

Find It Fast

Type 99 after any Mall merchant's GO command (i.e., GO CE99), and zip to a list of the merchant's featured products.

A. Now you can get everything you always wanted in a performance car—your family.

The Nissan® Stanza,® everything a family car should be—comfortable, reliable, economical and practical. Plus, it's equipped with the most powerful standard engine in its class—a 2.4-liter, 138-horsepower, 12-valve, multiport, sequentially fuel-injected engine. Add to that, four-wheel, independent suspension as standard equipment, a generous, 90.7-cubic-foot passenger compartment, a grocery-baggobbling 14 cubic feet of trunk space and anti-lock brakes, available on the GXE model. Test drive the Nissan Stanza at a Nissan dealer near you today.

From Nissan Motor Corp. GO NI



B. Computing and electronics magazines.

Enjoy super savings on leading computing and electronics publications. Computing magazines include *Personal Computing*, *PC Magazine*, *Byte*, *PC World* and *Personal Publishing*. Electronics publications include *Audio*, *Video*, *Modern Electronics* and *Stereo Review*.

From Publishers Clearing House. GO PUB

C. Quick reference guides.

Help is at hand on all the most popular computing subjects. Quick reference guides are spotlighted this month. Find dBase IV: The Pocket Reference from Osborne/McGraw-Hill (\$6.95), PC Tools Quick Reference from Que (\$7.95), WordPerfect 5.1 Instant Reference by Sybex (\$7.95), and from Microsoft Press, Microsoft QuickPascal: Programmer's Quick Reference (\$6.95) and The Norton Utilities: Microsoft Quick Reference (\$6.95). Shop Walden Computer Books connect-time-free every weekend!

From Walden Computer Books. GO WB

Introducing Collector Car Price Guide.

Used Car Price Guide announces an all-new *Collector Car Price Guide*. Looking for that special old Ferrari? Want to know what your '57 Chevy convertible is worth or how much that '62 Corvette will set you back? The *Collector Car Price Guide* is the answer. Ferraris ... Aston Martins ... Shelby Mustangs ... Alfa Romeos ... Jaguars ... MGBs ... Morgans ... You name it and Used Car Price Guide probably can price it for you.

To launch the service, Used Car Price Guide will post free "For Sale" notices of collector cars online during August only. Put your vintage car up on the block. Check out models offered by fellow CompuServe members. Price the car of your dreams!

From Used Car Price Guide. GO UC

Meet Max Ule, online discount broker.

Meet Max Ule, Harvard MBA and the nation's first online discount broker. Through the New York brokerage firm of Herzog Heine Geduld, Max Ule offers members a full line of discount brokerage services, including online order entry of all NYSE, AMSE and OTC stocks, IRA and Keogh Plan accounts, Ginnie Mae certificates, Dreyfus liquid assets funds and Zero coupon bonds. Minimum transaction fee of \$35. Request a complete fee schedule online.

Also, sign up to receive "Stock-of-the-Week" electronically. Each week, the experts at Herzog Heine Geduld select and profile a stock they believe to be a sound investment. Receive periodic bond recommendations, too. Complete details online.

From Max Ule Tickerscreen.® GO TKR

D. Online incorporation service.

A Guide to Incorporating, the first online guide to incorporation anywhere in the United States, offers information on the advantages and costs of incorporating. Complete the electronic orderentry form to incorporate online within 24 hours. Plus, check out the new Guild for American Enterprise, an organization offering entrepreneurial information, discounts and services, such as low-cost health insurance and legal services and substantial savings on merchant processing VISA/MasterCard charges. Guild for American Enterprise can save you time, money and headaches.

From A Guide to Incorporating. GO INC

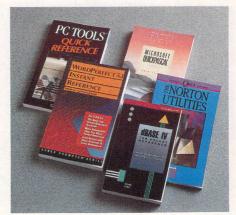
Self-inking stamps.

Self-inking stamps with built-in ink pad. Choose from black, blue or red ink. One line (\$12.95) to five lines (\$16.95).

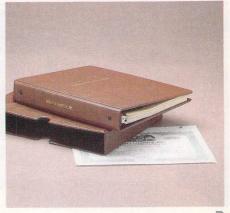
From Executive Stamper. GO EX



B



C



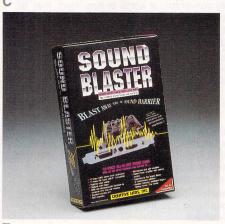
D













A. Wireless, supervised, home protection. A snap to install. Features dual alarms that flash lights and sound a piercing 85-decibel alarm. Provides 16 zones of coverage for whole-house protection. Remote control, too. From Heathkit. GO HTH \$99.97.

B. Chromochron wall clock.

Quartz-movement wall clock tells time with colors instead of numbers. Twelve vivid color segments delineate the hours. Each 61½6-square-inch clock face is an original silk screen covered with a mineral crystal and surrounded by a black natural stone face. 15¾-inch height, 13-inch width and 1-inch depth. From Hammacher Schlemmer. GO HS \$550.

C. Mars 128 hand scanner.

Scan images into your IBM or Macintosh. Can be used for optical character recognition, desktop publishing or fax. Features 5-inch scanning width, four scanning modes, 16 shades of gray, plus more. Package includes hand scanner, interface card, scanning and Halo desktop publishing editing software. From Miltrobe Electronics. GO MI \$249.95.

D. High-speed internal/external modems. Faster than a speeding bullet ... it's 9600 baud! Shop online for a wide selection of 9600-

Shop online for a wide selection of 9600-baud internal and external modems, including PC/Works 9600-baud V.32 external modem (\$641) and internal modem (\$534); Telebit Trailblazer Plus external (\$999) and internal (\$899); US Robotics 9600 HST (14.400 BPS) external (\$609) and internal (\$640).

Also offered online, 300- to 2400-baud modems, facsimile systems for PCs, PCX voicemail systems, bulletin board software, scanners, hard drives, printers, laptops and more. From Online Store. GO OS

E. Sound Blaster by Creative Labs.

Turn your favorite computer games into stereo experiences. Features 12-voice stereo C/MS music card, a digitized voice channel, voice input and more. For IBM and compatibles. From Software Discounters of America. GO SDA \$179.

F. White goose-down pillows.

Made in the USA of 220-count cambric cotton. Packages of two. Standard pillows, 20-by 26-inch (\$89.90); queen pillows, 20- by 30-inch (\$109.90); king pillows, 20- by 36-inch (\$129); European square pillows, 26- by 26-inch (\$139); breakfast pillows, 12- by 16-inch (\$23.90); and neckroll pillows, 6- by 14-inch (\$29.90).

From Spiegel. GO SGL

A. Portable Chess and Backgammon.

Folding Chess and electronic Backgammon. The world's smallest Chess computer folds to pocket size. Memory-save feature and LCD display (\$37.50). Battery included. Pictured here, all-new electronic Backgammon. Play alone or against an opponent. Choose from three game modes and two dice modes (\$89.95).

From Sharon Luggage and Gifts. GO SL

B. Say it with balloons and cookies.

"Happy Birthday." "Thank You." "Thinking of You." Say it with balloons and cookies. Pictured here, "Thinking of You" helium balloon with your personal message (up to five words) inscribed on the back. Includes a 9.5-ounce tin of five favorite varieties of Pepperidge Farm cookies. Balloons for every occasion! From Pepperidge Farm. GO PF \$20.95.

C. Timex timepieces.

Be on time with Timex. Featured watches include Timex Aerobix watch, a preprogrammed countdown timer for women in three styles (\$22.49), Timex calculator wrist watch, a full-function digital watch and 12-key calculator (\$17.99), Timex Triathlon Chronograph digital watch, featuring alarm-timers with eight-lap memory and recall (\$31.49), and Timex "ZuluTime" digital and analog watch, combining three time zones, 24-hour chronograph, 24-hour countdown timer and compass direction ring (\$53.95).

From Court Pharmacy. GO RX

D. Sensational scents for bath or shower.

Avocado Oil. Persian Lilac. Jojoba. Goatmilk. Cucumber. Apricot Kernel Oil. Discover the essence of each, online at Crabtree & Evelyn. Select from an array of bath products, including shampoos, conditioners, moisturizing creams, body lotions and bath gels, most priced less than \$10. Ten scents in all, each with a unique history and healing properties. From Crabtree & Evelyn. GO CR

Wind chimes.

Chimes of Olympos and Chimes of Lun. Experience the soothing sound of the Chimes of Olympos, reproducing the pentatonic scale used by the Greek musician, Olympos, in the seventh century B.C. Each chime has been tuned electronically to produce and maintain the purest tonal integrity.

Harmonize with the Chimes of Lun, a relaxing, reflective, delightfully oriental version of the pentatonic scale introduced by the Chinese court musician, Ling Lun, more than 4,000 years ago. Both chimes are weather-protected to last through the seasons, year after year. Available in silver, gold or black. From Williams & Eeden Garden Center. GO WE \$69.95 each.

Find It Fast

Type 99 after any Mall merchant's GO command (i.e., GO CE99), and zip to a list of the merchant's featured products.









I

The Electronic Mall Directory is designed to assist you with information about each of our merchants. All entries contain three lines as follows:

Merchant Name [GO Command]

Description of products/services Billing options Countries served

An example entry would look like this: ABC NOVELTY STORE [ABC]

Books, knick-knacks, collectibles VI/MC/AM/CSH US/CD/JP/OT

You may visit the ABC NOVELTY STORE by using the quick reference word (GO ABC) at any CompuServe Information Service ! prompt

Billing options codes indicate the methods of payment the merchant

VI - VISA MC - MasterCard AM - American Express DI - Diners Club DIS - Discover Card

SC - Merchant's own store card COD - COD CSH - Cash, check, money order DB - Direct bill NA - No billing applies (Advertiser only)

Country codes indicate the countries the merchant is able to ship to as follows:

US - United States CD - Canada

JP - Japan

OT - Other foreign countries

Catalog options for merchants offering catalogs are indicated by the following codes

Offers free print catalog

Denotes electronic order form for use with print catalog

Credits cost of print catalog toward purchase

Denotes new merchant.

AIR FRANCE [AF] Information on tours, sights and scenes. VI/MC US/CD

ALAMO RENT A CAR [AL] Information on rates, benefits, locations. NA US/OT

ALASKA GENERAL STORE [AK] ** Alaskan jewelry, ivory, gold, gifts VI/MC/AM/DIS US/CD/JP/OT

ARTWEAR/OUTWEST [AO] ** Hand-designed shirts and jewelry. VI/MC/AM US/CD/JP/OT

AT&T HOME-OFFICE RESOURCES ONLINE [ATT] Technology that brings success

home. NA US/CD/JP/OT

AT&T TOLL-FREE 800 DIRECTORY [ATT]

Thousands of toll-free numbers always **free** of connect- time fees.

AUSTAD'S GOLF SHOP [AU] ** Golfing accessories, apparel, gifts. VI/MC/AM/DIS US

AUTOQUOT-R [AQ] Vehicle price quotation service. VI/MC/AM US

BRADY BOOKS [BB] PC books, utilities, software.

BROOKS BROTHERS [BR] **
Fine men's and ladies' apparel and accessories VI/MC/AM/DI/SC US/CD/JP/OT

BUICK MAGAZINE [BU] Free car information, customer service

BUSINESS WEEK [BW]
Subscription packages and information.
VI/MC/AM/DB US/CD/JP/OT

CD CLUB [CD] * Compact disk ordering club. CD-ROM STORE, THE [RS] CD-ROM drives and accessories. VI/MC US/CD/JP/OT

CDA COMPUTER SALES

Hardware, printers and accessories.
VI/MC/AM/DIS/CSH US/CD/JP/OT
CHECKFREE CORP. [CF]
Electronic banking and bill payment VI/MC/AM US

CHEF'S CATALOG, THE [CC] ■ * Gourmet cookware and kitchen accessories VI/MC/AM/DIS US

CIGNA INSURANCE [CI]
Free personalized auto insurance quotes NA US

CLASSICAL MUSIC CLUB [CM] * Classical music ordering club

COFFEE ANYONE ???™ [COF] Original computer coffeehouse,

VI/MC US/CD/JP/OT

COMPUSERVE STORE [ORDER]
Merchandise, literature and software

COMPUTER EXPRESS [CE] * PC software, hardware, accessories. VI/MC US/CD/JP/OT

COMPUTER SHOPPER [CS]
Computer product bargains and information magazine VI/MC/DB US/CD

COMPUTER SPORTS WORLD [CSW]

Sports information database VI/MC/AM/DI/COD US/CD/OT

CONTACT LENS SUPPLY [CL] Fast delivery of replacement lenses

and more. VI/MC/CSH US CORNER VIDEO [CV]
Videos, laser disks and accessories.
VI/MC/AM US/CD/JP

COURT PHARMACY [RX] Full-service pharmacy and gift shop. VI/MC/AM/DI/DIS/COD US/CD/JP/OT

CRABTREE & EVELYN [CR] *
Beauty products, sweets, gift packs.
VI/MC/AM US/CD

CREATE-A-BOOK [CK]

Fun books that make your child a star.

DIRECT MICRO [DM] * Discount computer disks and

supplies. VI/MC/COD US/CD/JP/OT

DISCOUNT MUSIC SUPPLY [DMS] *

Guitar effects and accessories. VI/MC/COD US/CD/JP/OT

DOW JONES & CO. [DJ]
Business and financial periodicals.
VI/MC/AM US/CD

DREYFUS CORP. [DR] Mutual funds and investment information. VI US

EDUCATIONAL ADVISORY SERVICES [EA]
Financial aid search service.

VI/MC US

EXECUTIVE STAMPER [EX] ** Rubber stamps, engraved gifts. VI/MC/AM/DI/DIS US/CD/JP/OT

FLORIDA FRUIT SHIPPERS [FFS]

Premium fruit and gift shippers. VI/MC/AM US/CD/JP/OT

FLOWER STOP [FS] Flower and gift delivery service.

FORD MOTOR CO. [FORD] Car and truck information, dealer

locator. VI/MC US/CD

FRANCE INFO USA [FI]
A kiosk of information about France.
VI/MC/AM/COD/DB US/CD/JP/OT

GIMMEE JIMMY'S COOKIES [GIM] Gourmet cookies, custom orders

GODIVA CHOCOLATIER [GC] * * Gourmet chocolate and gifts VI/MC/AM US

A GUIDE TO INCORPORATING [INC]

Nationwide incorporating service. NA US

H&R BLOCK [HRB] The income tax people. LIS

HAMMACHER SCHLEMMER
[HS] **
Gifts, unique and unusual products.
VI/MC/AM/DI US/CD/JP/OT

HEATHKIT [HTH] **
Build-it-yourself electronic kits, etc.
VI/MC/AM/SC US/CD HELEN HUTCHLEYS LA

DOLCERIA [HH] **
Chocolate, nuts and candy.
VI/MC/AM US

HOBBY CENTER TOYS [HC]
Hobbies, trains, dolls and games.
VI/MC/AM/DI/DIS/CSH US/CD/JP

JCPENNEY [JCP] * Apparel, furnishings, electronics. VI/MC/AM/DI/DIS/SC US

LASER'S EDGE, THE [LE] Your one-stop laser video store. VI/MC/AM/DIS US/CD/JP/OT

LOBSTER EXPRESS [LOB] Seafood gift pack specialist CSH US/CD

MACFRIENDS [MF] * + Macintosh hardware and products. VI/MC/AM/DIS/COD

MACUSER [MC] Save 58 percent and receive free

gift. VI/MC/DB US/CD

MACWAREHOUSE [MW] ■ * Macintosh hardware, software and equipment VI/MC/COD US/CD/JP/OT

MARYMAC INDUSTRIES [MM] Official Radio Shack dealer. VI/MC/AM/DIS/CSH US/CD/JP

MAX ULE DISCOUNT BROKERAGE [TKR]
Brokerage and financial information retrieval.

CSH US/CD/JP/OT MCGRAW-HILL BOOK CO. [MH] ■ * Business, finance and computer

books. VI/MC US/CD/JP MENTOR TECHNOLOGIES [MN]

Authorized CompuServe training VI/MC US MICROWAREHOUSE [MCW] * *
Hardware, software and equipment

VI/MC/COD US/CD/JP/OT

MILTROBE ELECTRONICS Consumer electronics, tools, gifts. VI/MC/CSH US/CD

MONEY'S FINANCIAL MARKET Personal finance tools from Money VI/MC/AM

MUSEUM OF FINE ARTS,
BOSTON [FA] **
Gifts and classic reproductions.
VI/MC/AM US/CD/JP/OT

MUSIC ALLEY ONLINE [MAO]
Mixers, synthesizers, keyboards, etc.
VI/MC/COD US/CD

NEWSNET [NN]
Specialized business news database service

NA US/CD NISSAN MOTOR CORP. IN THE Nissan cars, trucks, accessories VI/MC US

OCEAN ISLE SOFTWARE [OI]
Neurobics: PC adventures for your VI/MC US

OFFICIAL AIRLINE GUIDES [OA] Information on online services; air and hotel guides.

ONLINE STORE [OS] Computer accessories, hardware. VI/MC/AM/DI US

PAUL FREDRICK SHIRTS CO. [PFS]
Classic shirts from the tailor to you.

PC/COMPUTING [PCC] Save 58 percent and receive free gift. VI/MC/DB US/CD

PC MAGAZINE [PM]
Save 54 percent and receive free gift.
VI/MC/DB US/CD

PENGUIN BOOKS [PB] ** Books, new titles, catalogs. VI/MC/AM/DIS US/CD/JP/OT

PENNY WISE OFFICE PRODUCTS Full range of brand-name office products

PEPPERIDGE FARM [PF] ** Gourmet cookies, candies, gifts, etc. VI/MC/AM/DI/DIS US

PREVENTION SYSTEMS [PS] ** Affordable, healthful diet supplements. VI/MC/AM/CSH US/CD

PRICE MOTORCARS [PRC]
Auto accessories and gifts of distinction VI/MC/AM/DIS US/CD/JP

PROGRAMS PLUS [PP]
Apple/Macintosh software and accessories. VI/MC US/CD/JP/OT

PUBLISHERS CLEARING HOUSE [PUB]

Magazine subscriptions at low prices.

PUSH PEDAL PULL FITNESS [PPP] **
Professional home exercise equipment VI/MC/AM/DIS US

RADIO DOCTORS [RD] ■ *
Music on CD and cassette.
VI/MC/AM/DIS US

RECORD AND TAPE CLUB [RT] * Record and tape ordering club. DB US

RENT MOTHER NATURE [RM] ** Nature's gifts, leasing programs, etc. VI/MC/AM US/OT

SAFEWARE COMPUTER INSURANCE [SAF] High-tech equipment insurance.
VI/MC US/CD/JP/OT
SEARS [SEARS] * + •

[SEARS] * ++ Electronics, home/office supplies, Nintendo and videos. DIS/SC US

SHARON LUGGAGE AND GIFTS [SL] **
Luggage, fine leather goods and unique gifts. VI/MC/AM US/CD/JP/OT

SHOPPERS ADVANTAGE CLUB [SAC] Discount shopping club. VI/MC US

SIMON DAVID [SIM] **
Gourmet foods, meats from Texas.
VI/MC/AM/DIS US/CD/JP/OT

SMALL COMPUTER BOOK CLUB Quality computer books. DB US/CD

SOFTWARE DISCOUNTERS OF AMERICA [SDA]
Software for a wide range of

computers. VI/MC US/CD/JP/OT

SOME THINGS SPECIAL UNIQUE
BOUTIQUE [SP] * *
Unique gifts and computing accessories.
VI/MC/AM/DIS US/CD

SPIEGEL [SGL] • ★
Fashion, gifts and electronics.
VI/MC/AM/SC US

SPORT SOURCE, THE [SS] ** Sporting goods, apparel, accessories. VI/MC US/CD/JP/OT

STATIONERY CENTER, THE

Office supplies, furniture, etc. VI/MC/AM/DIS/COD US/CD/JP

TALL TAILS [TT]
Supplies and gifts for your pet.
VI/MC/COD US/CD/JP/OT

TIME-LIFE BOOKS, MUSIC AND

WIDEOS [TL]
Books, music and video series.
VI/MC/AM US

TRW CREDENTIALS [CRE]
Know the details of your credit status. VI/MC/AM US

TSR GAMES SHOPPE [TSR] ** Adventure, fantasy games and accessories. VI/MC US/CD/JP/OT

USA TODAY [UT] Subscribe to the nation's newspaper VI/MC/AM US

USED CAR PRICE GUIDE [UC]
Wholesale/retail prices from 1978.
VI/MC US/CD

WALDEN COMPUTER BOOKS [WB] Computer books and accessories. VI/MC/AM US/CD/JP/OT

WALTER KNOLL FLORIST VALTER KNOLL FLORIST [WK]
Plants, flowers and gifts via FTD.
VI/MC/AM/DI/DIS/DB US/CD/JP/OT

WILLIAMS & EEDEN GARDEN
CENTER [WE] * *
Flowers, plants and garden tools.
VI/MC US/CD

WINDHAM HILL [WH] **
Jazz, New Age, children's recordings.
VI/MC/AM US/CD/JP/OT

YES! BOOKS AND VIDEOS [YB] ** A unique collection of books and videos. VI/MC/AM US/CD/JP/OT

APPAREL/ACCESSORIES

Artwear/Outwest ■ * AO Austad's Golf Shop ■ * AU BR Brooks Brothers ■ * JCPenney • * JCP Paul Fredrick Shirts Co. Sharon Luggage and Gifts ■ * Spiegel ● * PFS SL SGL The Sport Source ** SS

ARTS/MUSIC/VIDEO

CD Club * CD Classical Music Club CM Corner Video CV Discount Music Supply ■ * DMS The Laser's Edge LE MAO Music Alley Online Museum of Fine Arts, Boston FA Radio Doctors ■ * RD RT Record and Tape Club *
SEARS Sears * * †

Time-Life Books, Music and TL

Windham Hill ■ * YB YES! Books and Videos **

AL Alamo Rent A Car Autoquot-R AQ BU Buick Magazine CIGNA Insurance CI Ford Motor Co. FORD Nissan Motor Corp. in the USA NI

Price Motorcars PRC Used Car Price Guide UC

BOOKS/PERIODICALS

Brady Books BB Business Week BW CS Computer Shopper CK Create-A-Book Dow Jones & Co. DJ McGraw-Hill Book Co. ■ * MH MC MacUser Money's Financial Market MEM PCC PC/Computing

Penguin Books ■ * PB Publishers Clearing House PUB BK Small Computer Book Club Time-Life Books, Music and TL Videos UT USA Today Walden Computer Books WB

PC Magazine

BUSINESS/FINANCE

PM

AT&T Home-Office ATT Resources Online AT&T Toll-Free 800 Directory Business Week BW CheckFree Corp. CF DR Dreyfus Corp. Dow Jones & Co. DJ A Guide to Incorporating INC H&R Block HRB Max Ule Discount Brokerage TKR Money's Financial Market MEM

NewsNet CRE **TRW Credentials CLUBS/MEMBERSHIPS**

Classical Music Club * CM CD CD Club * Record and Tape Club * RT Shoppers Advantage Club * SAC BK Small Computer Book Club Time-Life Books, Music and TL

COMPUTING

NN

CDA Computer Sales ** CDA RS The CD-ROM Store CompuServe Store ORD Computer Express * CE Computer Shopper
Direct Micro *
Heathkit * CS DM HTH MacFriends ■ * † MF MC MacUser MacWarehouse ■ * MW Marymac Industries
MicroWarehouse ** MM MCW OI Ocean Isle Software OS Online Store PC/Computing

PC Magazine Programs Plus SAF Safeware Computer Insurance

PM

SDA Software Discounters of America SP

Some Things Special Unique Boutique * Walden Computer Books ■ * WB

GIFTS/FLOWERS/GOURMET FOODS

Alaska General Store ** AK AT&T Toll-Free 800 Directory
The Chef's Catalog ** ATT CC COF Coffee Anyone™ ??? Crabtree & Evelyn * CR Florida Fruit Shippers Flower Stop **FFS** FS Gimme Jimmy's Cookies GIM Godiva Chocolatier " * GC Hammacher Schlemmer ■ * HS Helen Hutchleys La Dolceria ** HH LOB Lobster Express Museum of Fine Arts, Boston FA Pepperidge Farm ■ * PF Rent Mother Nature ■ * RM SL Sharon Luggage and Gifts * Simon David ■ * SIM Some Things Special Unique Boutique * SP WK Walter Knoll Florist WE Williams & Eeden Garden Center *

HEALTH/BEAUTY Contact Lens Supply CL

Court Pharmacy RX Crabtree & Evelyn ■ * CR Prevention Systems ■ * PS Push Pedal Pull Fitness ■ * PPP HOBBIES/TOYS/PETS

HC Hobby Center Toys SEARS Sears ■ * • † TT Tall Tails TSR Games Shoppe ■ *

Williams & Eeden Garden Center ■ * WE

INFORMATION/SERVICES

Merchants by Department

AT&T Home-Office Resources Online AT&T Toll-Free 800 Directory CI CIGNA Insurance CompuServe Store ORD CSW Computer Sports World **Educational Advisory Services** Mentor Technologies MN Safeware Computer Insurance SAF **TRW Credentials**

MERCHANDISE/ELECTRONICS

Brooks Brothers ■ * BR The Chef's Catalog ■ * CC ORD CompuServe Store RX Court Pharmacy Hammacher Schlemmer **
Heathkit ** HS HTH JCPenney • * JCP MI Miltrobe Electronics **
SEARS Sears ** † Shoppers Advantage Club Spiegel * SAC

OFFICE SUPPLIES

SGL

Direct Micro * DM Executive Stamper ** PW Penny Wise Office Products SEARS Sears ■ * • † The Stationery Center ■ * SC

SPORTS/LEISURE

Austad's Golf Shop ■ * Computer Sports World Hammacher Schlemmer ■ * Push Pedal Pull Fitness **
The Sport Source ** SS

TRAVEL/VACATIONS

Air France AF AT&T Toll-Free 800 Directory ATT France Info USA FI Official Airline Guides OA Sharon Luggage and Gifts ■ * SL

Free Shopping

Remember ... Connect time is always free at AT&T Toll-Free 800 Directory (GO ATT) and Buick Magazine (GO BU). Plus, shop the following stores free on select weekends. Connect-time is free from 12:01 a.m. ET Saturday through 11:59 p.m. ET Sunday.

August 4 and 5

Brooks Brothers GO BR Ford Motor Co. GO FORD Publishers Clearing House GO PUB Sears GO SEARS Time-Life Books, Music and Videos GO TL Walden Computer Books GO WB

August 11 and 12 CheckFree GO CF CIGNA Insurance GO CI

Heathkit GO HTH Walden Computer Books GO WB

August 11 through 19

Flash! Shop free of connect-time fees every day at MacFriends. GO MF

August 18 and 19

Walden Computer Books GO WB

August 25 and 26

CIGNA Insurance GO CI Heathkit GO HTH Walden Computer Books GO WB

September 1 and 2

Brooks Brothers GO BR Time-Life Books, Music and Videos GO TL Walden Computer Books GO WB

September 4 through 11

Flash! Shop JCPenney free of connect-time fees every day. GO JCP

September 8 and 9

CIGNA Insurance GO CI Coffee Anyone ??? GO COF Contact Lens Supply GO CL Max Ule Tickerscreen GO TKR Museum of Fine Arts, Boston GO FA NewsNet GO NN Publishers Clearing House GO PUB Software Discounters of America GO SDA Walden Computer Books GO WB

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- a large-screen TV, compliments of JCPenney;
- · a complete Macintosh computer system, compliments of CDA Computer Sales; or • a "dream kitchen," compliments of The
- Chef's Catalog.

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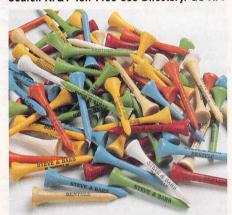
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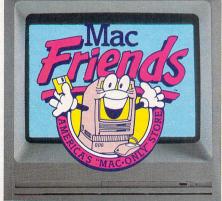


Visit Austad's End-of-Summer Sale. GO AU



Shop Sears for Nintendo. GO SEARS





Explore MacFriends with free connect. GO MF

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UPDATE



View Art by Erte in Forum Library

The Art Gallery Forum is featuring a Showcase Library (3) dedicated to the works of the Russian-born art deco designer, Erte. The online exhibition includes Erte's lithographs, serigraphs, bronze sculptures, crystal and silver "objets d'art" and more. GO ARTGALLERY

CompuServe Information Manager for the Macintosh can be ordered online (GO ORDER) for \$24.95. A \$15 connect-time credit is included. CompuServe Information Manager presents new dimensions and a new look to the CompuServe Information Service, enabling members to access, sort and use information more effectively. Visit the free Macintosh CIM Support Forum (GO MCIMSUP) for details. Also watch for the latest upgrades online. GO MACCIM

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CompuServe has enhanced Sniper! with grenades. Streams and ponds also have been added to some of the maps. In addition, when playing in "free-for-all" mode, a player will have two or three opponents. Sniper! is a war game based on the TSR board game. Work together or separately, but the object of the mission is to be the last squad on the map. GO

Adventures in Travel Writer Lee Foster has written two articles on China. Foster includes an exclusive interview with China's Minister of Tourism, Liu Yi. Recalling the tragedy of Tiananmen Square in June 1989, the articles are "China's Perennial Favorite Attractions: Beijing, Xian and Shanghai" and "The Dilemma of China Tourism: To Go or Not to Go, a Viewpoint." GO AIT

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Download new Novell releases online. The NetWare DOS Client Kit, Version 3.01, supports extended and expanded memory. It also is upgrade-compatible with Microsoft Windows 3.0. Also receive the NetWare Requester for OS/2, Version 1.2, online. GO NDD

NEXT MONTH • Getaways Anonymous: Travel Planning from Start to Finish • Notes from Novell: Expanding by Demand • Take Stock in the Unknown: Undervalued Values • Saving Mother Earth: Conservation Starts Here • Miss Online Manners: Etiquette for Your Modem

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